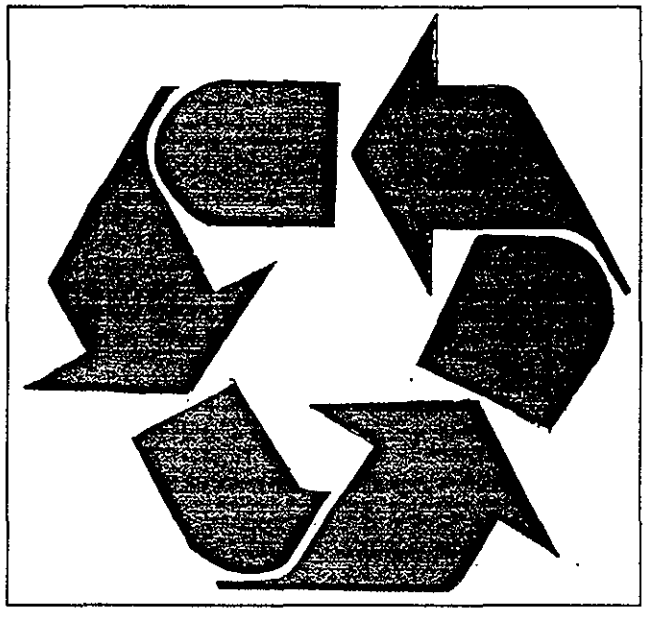
COLEBROOK RIVER LAKE
FLOOD CONTROL PROJECT
CONNECTICUT RIVER BASIN, CONNECTICUT

Solid Waste Management Plan

RECYCLE CONSERVE RESOURCES



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There are a number of Federal, state, and local laws and regulations relating to solid waste management. This plan provides guidance to establish policies, and responsibilities, procedures, and instructions for proper handling, storage, disposal and recycling of solid waste generated at the flood control project. Solid wastes include petroleum, oil and lubricants, hazardous waste, paper, beverage and food containers, woody debris, and various other wastes.

Information was developed from a literature search and review of Federal, state, and local requirements and existing and anticipated waste streams. This plan is not a complete treatise on environmental laws and regulations. It is a list of solid waste regulations, policies, and references that may apply to the flood control project and a codification of existing and enhanced procedures for solid waste management.

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SOLID WASTE MANAGEMENT PLAN

COLEBROOK RIVER LAKE,
FLOOD CONTROL PROJECT

CONNECTICUT RIVER BASIN,
CONNECTICUT

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October 1997

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
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GENERAL

1-1 Introduction

This is the Solid Waste Management Plan including, hazardous waste, petroleum, oil, and lubricants (POLs), and recycling for the Colebrook River Lake Flood Control Project located in Colebrook, Connecticut and Sandisfield and Tolland, Massachusetts. (See Figure 1.)

1-2 Purpose

The plan provides guidance to establish policies, responsibilities, procedures, and instructions for the proper handling, storage, disposal and recycling of all solid waste generated at the project. Solid wastes include petroleum, oil and lubricants (POLs), hazardous waste, paper, beverage containers, woody debris, and various other wastes.

The plan was developed from a literature search and review of federal, state, and local requirements and existing and anticipated waste streams. The plan is not a complete treatise on environmental laws and regulations. It is a list of solid waste regulations, policies, and references that may apply to the flood control project and a codification of existing and enhanced procedures for solid waste management.

1-3 Flood Control Project Description

Colebrook River Lake, in Colebrook, Connecticut, is located on the West Branch of the Farmington River. The dam embankment is situated within the pool of the West Branch Reservoir, which is formed by the Goodwin Dam, owned by the Hartford Metropolitan District Commissiom (MDC) and located less than 1-1/2 miles downstream. A hydroelectric power facility was constructed at the dam by the MDC.

Colebrook River Lake reduces flood levels at the downstream communities, aids in reducing flood levels along the Connecticut River, and provides recreation, fishery, and water supply conservation. Colebrook Lake is a multipurpose project built and operated by the

Corps of Engineers. Construction was completed in June 1969.

Important physical components of the project consist of the dam, dike, spillway, and outlet works.

The project consists of a earth fill dam with stone slope protection 1,300 feet long and 223 feet high; an earthfill dike 1,240 feet long and 54 feet high; a gated circular outlet tunnel edged in rock 774 feet long and 10 feet in diameter; and a concrete spillway 205 feet in length with a crest elevation of 761 feet NGVD.

Project lands for the Colebrook River Lake project are comprised of a total of 388 acres owned in fee, and 1,135 acres controlled through flowage easement.

Colebrook River reservoir is open to recreation on a limited basis only. Fishing, and boating related to fishing, are allowed during the fishing seasons of Massachusetts and Connecticut. All other water associated recreation is prohibited because reservoir impoundment includes storage for municipal water supply. Picnicking is not allowed on lands surrounding the reservoir; however, these lands are open to public hunting and hiking.

1-4 Overview of Solid Waste Generation

Facilities at the project that are waste generators or waste storage areas include the project office/utility building, engineer office, control tower at the dam, log boom and project lands where there can be illegal dumping of trash. The log boom captures woody debris and other debris primarily during the spring.

There are no active on-site landfills. The burial of solid waste is not permitted. Solid waste generated in the project area is either carried out under the provision of service, maintenance and disposal contracts (the contractor is responsible for assuring that all materials are disposed of in a manner consistent with local, state and federal laws), or composted onsite.

Activities such as automobile maintenance are usually conducted off-site by a licensed service station. Minimal hazardous wastes are generated at the project.

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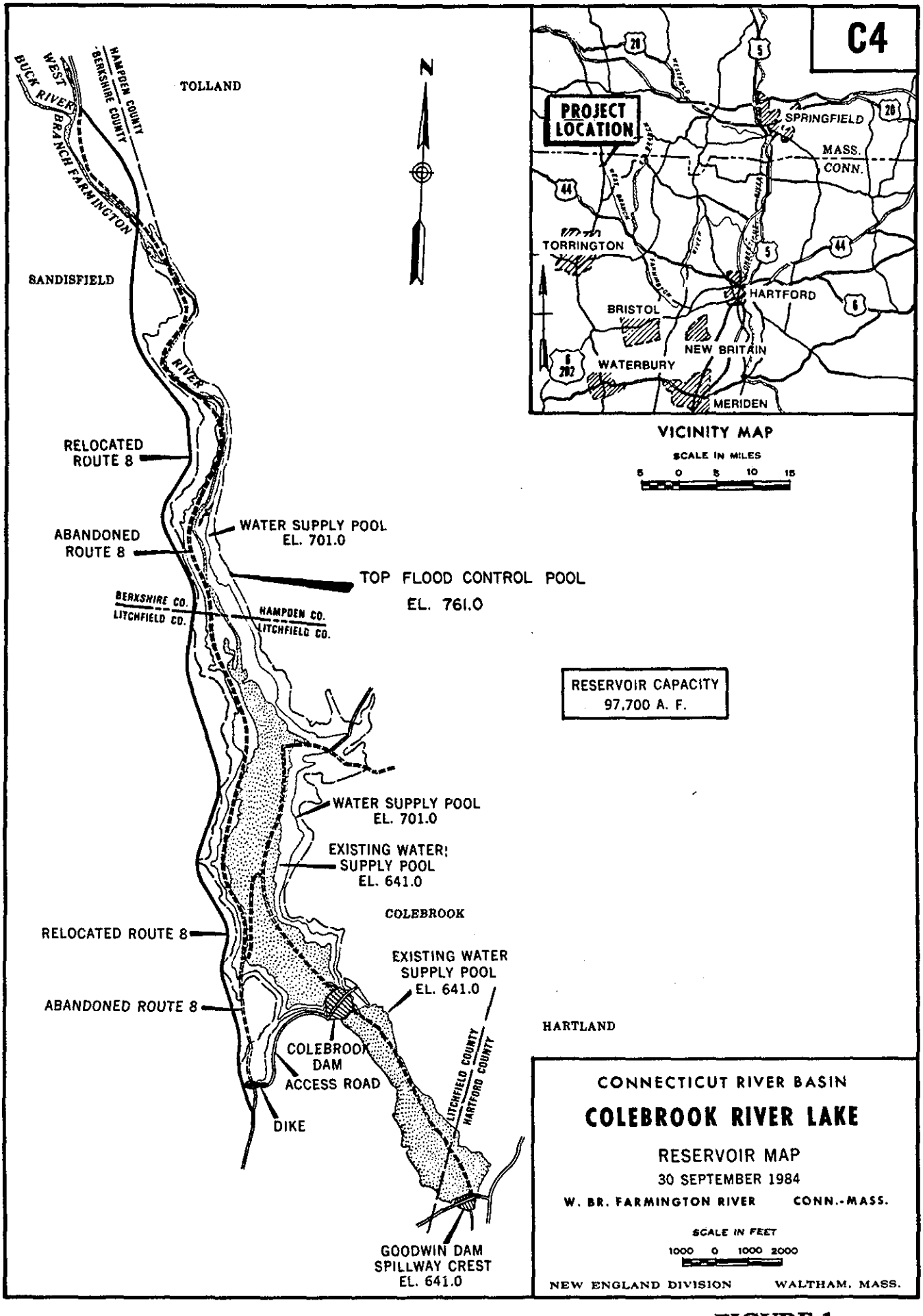

FIGURE 1

LAWS, REGULATIONS, and DIRECTIVES

2-1 Federal

The following is a list of pertinent Federal Statutes and Regulations, Executive Orders, Department of Defense Directives, Department of the Army Regulations, and Corps of Engineers Engineering Regulations. This list should be updated periodically as laws and regulations are modified and reviewed by legal counsel, as appropriate, to determine the completeness and applicability of the list.

Statutes

Resource Conservation and Recovery Act (RCRA) of 1976, PL94-580, as amended

Subtitle C - Hazardous Waste Management

Subtitle D - State or Regional Solid Waste Management Plans

Toxic Substance Control Act (TSCA) of 1976, Public Law 94-469, as amended.

Federal Facilities Compliance Act (FFCA) of 1992, P.L. 102-386.

Code of Federal Regulations

U.S. Department of Transportation (DOT) Hazardous Materials Regulations including Registration of Persons Who offer for Transport Hazardous Materials (Title 49 CFR, Part 107) Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements (Title 49 CFR, Part 172, 173) Segregation and Separation Chart of Hazardous Materials (Title 49 CFR, Part 177), and Packaging Standards (Title 49 CFR, Part 178).

U.S. Environmental Protection Agency (EPA) Protection of the Environment, Hazardous Waste Management Regulations (Title 40 CFR, 260-266).

U.S. Environmental Protection Agency (EPA) Protection of the Environment, Solid Waste Management Regulations (Title 40 CFR, 240-258)).

Department of Defense Directives

DoD 4160.21-M, Defense Utilization and Disposal Manual, September 1982, as amended.

DoD Directive Number 4165.60, Solid Waste Management, dated 4 Oct 74.

Department of the Army Regulations

AR 200-1, Environmental Protection and Enhancement, Chapter 5, Hazardous and Solid Waste Management; Chapter 10, Pollution Prevention, 21 February 1997

AR 420-47, Solid and Hazardous Waste Management, 1 December 1984.

US Army Corps of Engineers Regulations

EP-200-1-2, Process and Procedures for RCRA Manifesting, 31 March 1994.

ER 200-2-3, Environmental Compliance Policies, 30 October 1996.

EP 200-2-3, Environmental Compliance Guidance and Procedures, 30 October 1996

Executive Orders

Executive Order 12088, Federal Compliance with Pollution Standards

Executive Order 12780, Federal Agency Recycling and the Council of Federal Recycling and Procurement Policy, Nov 4,1991.

Executive Order 12873, Federal Acquisition, Recycling, and Waste Prevention, Oct 22, 1993.

Executive Order 12843, Procurement Requirements and Policies for Federal Agencies for Ozone Depleting Substances, April 21, 1993.

Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, August 3, 1993.

Executive Order 12902, Energy Efficiency and Water Conservation at Federal Facilities, March 8, 1994.

Memoranda

Memorandum, CECC-ZA, dated 30 October 1992, Subject: Federal facilities Compliance Act (FFCA).

Memorandum, CECW-OA, dated 24 Nov 1992, Subject: USACE Facilities Environmental Compliance Letter No. 1, Solid Waste Recycling. (Superseded by memo dated April 1997, see below.)

Memorandum, CECW-OA, dated 25 August 1993, Subject: Hazardous Waste Manifest Policy and Procedures

Memorandum, CEMP-CP, dated 4 May 1993, Subject Hazardous Waste Manifest Signature Policy and Procedures (Construction Bulletin 93-6)

Memorandum, CECW-OA, dated 22 February 1995, USACE Facilities Environmental Compliance Guidance Letter No. 2 Federal facilities Compliance Act (FFCA) of 1992, Fines and Penalties at Civil Works Funded Projects, Facilities and Activities.

Memorandum. CECW-OA, dated January 1997, Commander's Policy Memorandum #3, Waste Reduction, Recycling and Priority Purchase of Environmentally Preferable and Recycled Products.

Memorandum, CECW-OA, dated April 1997, USACOE Facilities Environmental Compliance Letter No. 1, Waste Reduction and Recycling.

Reports

USACERL Special Report - EC 95/05, dated Nov 94, titled "Environmental Assessment and Management Team Guide (ERGO)".

USACERL Special Report - EC 95/07, dated Nov 94, titled "Environmental Review Guide for Operations (ERGO), Supplement for the Environmental Assessment and Management Team Guide".

2-2 State of Connecticut

The Federal government sets minimum national standards for solid waste disposal, but state and local governments are responsible for implementing and enforcing programs. The following is a list of pertinent State of Connecticut Statutes, Regulations, and Reports.

Connecticut Statutes

General Statutes, Title 22a -- Environmental Protection, Chapter 446d -- Solid Waste Management

General Statute, Title 22a -- Environmental Protection, Chapter 445 -- Hazardous Waste

Connecticut Regulations

Title 22a -- Solid Waste Management Regulation 22a-209 --, February 21, 1985, as amended.

Title 22a--Hazardous Waste Management Regulation 22a-449(c)-100 through 110 and 22(a)-449(c)-11, Revised July 17, 1990.

Title 22a -- Mandatory Recycling Regulation 22a-241b, February 28, 1989.

2-3 Local

The towns and municipalities in Connecticut have adopted ordinances to ensure compliance by residents and solid waste collectors with the requirements of Connecticut General Statutes, Chapter 446d, providing for the separation, collection, and processing and marketing of recyclable solid waste. The town ordinances are included as Appendix A.

2-4 Applicability

Federal Facilities Compliance Act of 1992. (P.L.- 102-386) This act provides for a waiver of sovereign immunity with respect to federal, state, and local procedural and substantive requirements relating to RCRA solid and hazardous waste laws and regulations. Additionally in

its passage of the Act, Congress clearly intended to subject Federal facilities to penalties and fines arising from violation of these laws.

Army Regulation 200-1, 21 February 1997. This regulation applies to Civil Works activities that are under the jurisdiction of the U.S. Army Corps of Engineers. Chapter 5, "Hazardous and Solid Waste Management" defines Army policy for managing hazardous and solid wastes. Some of the major program requirements are listed below.

- Civil Works activities are to comply with legally applicable and appropriate Federal, state and local regulations for managing, generating, treating, storing, disposing, and transporting hazardous and solid waste. [Section 5-2]

- Each installation generating hazardous waste will maintain an inventory of hazardous waste that is generated treated, stored, disposed of, or transported off-site.[Section 5-3b]

- Integrated solid waste management procedures, techniques and practices will be used to manage solid waste and will be documented in the installation Integrated Solid Waste Management Plan. [Section 5-10]

- Where feasible, installations will obtain solid waste service from municipal utility systems, regional and cooperative systems, private utility companies and the private sector. [Section 5-10]

- Installations are encouraged to cooperate to the extent practicable, in recycling programs conducted by the local civilian community. [Section 5-10]

Federal Recycling Requirements. (40 CFR 246.200-1 and 246.202-1, DoD 4165.60, Executive Order 12873, CECW-OA-memorandum 15 January 1997, CECW-OA-memorandum 21 April 1997.) According to direction provided in these documents, Corps facilities should reduce the volume of waste materials at the source and participate in any state or local recycling program and whenever practical. Agencies are also required to set goals for increasing the purchase of recycled and environmentally preferable products. Furthermore, the Commanders' Policy Memorandum #3 dated January 1997 referenced above, requires that Corps Districts initiate and/or maintain cost-effective waste reduction and recycling programs. (See Appendix G.)

Connecticut Regulations. RCRA, like most federal environmental legislation, encourages states to develop and manage its own solid waste program. The state program must be at least as stringent as the EPA program. Connecticut has been authorized by EPA to run its own solid waste program. Connecticut regulations are listed above. In Connecticut, all Corps facilities are required to recycle as mandated in the state recycling law and in local ordinances. Materials to be recycled include cardboard, glass food and beverage containers, leaves, metal food and beverage containers, newspaper, office paper, scrap metal, vehicle batteries, nickel cadmium batteries, and waste oil.

2-5 Suggested Policy Guidelines

Suggested policy guidelines for management of solid wastes including Petroleum, Oil, and Lubricants (POLs), waste liquid, and hazardous wastes are as follows:

a. The quantity of solid waste should be reduced at the source whenever possible. (Memorandum CECW-OA, 21 April 1997, 6a)

b. The projects shall initiate and/or maintain cost-effective waste reduction and recycling programs if they have not already done so. (Memorandum CECW-OA, 15 January 1997)

c. Non-hazardous and non-toxic materials should be used in facility and activity operations and procedures, when practicable. (Memorandum CECW-OA, 21 April 1997, 6d and 6e.)

d. To the extent possible, environmentally friendly products and products made from recycled materials should be purchased for use at the project. (Memorandum CECW-OA, 21 April 1997, 6d and 6e, Executive Order 12873.)

e. Hazardous wastes should be safely controlled, accounted for with an audit trail and chain of custody, and handled in accordance with legal requirements. (Federal Facilities Compliance Act of 1992.)

f. The project should not establish or maintain a landfill at the project. (Connecticut State Law, Section 22a-209-2. Prohibits open dumps.)

WASTE DEFINITIONS [1]

3-1 Solid Waste

Solid waste includes garbage, refuse, and sludge as well as any solid, semi-solid, liquid, or contained gaseous material that is discarded. A discarded material is one that has been determined to be an inherently waste-like material by the Environmental Protection Agency (EPA) Regional Administrator. Under certain circumstances, recycled materials are considered discarded materials (and therefore solid wastes) if they are used in a manner constituting disposal, burned for energy recovery, reclaimed, or accumulated speculatively. Certain wastes have been excluded from the definition of solid waste: domestic sewage; point-source discharges regulated under the Clean Water Act (CWA); irrigation return flows; source, special nuclear, or by-product material regulated under the Atomic Energy Act; *in situ* mining waste; pulping liquors that are reclaimed; spent sulfuric acid used to produce virgin sulfuric acid; and secondary materials reclaimed and returned to the original generation process for reuse. The regulatory definition of solid waste may be found in 40 CFR 261.2.

3-2 Hazardous Waste

The Resource Conservation and Recovery Act (RCRA) was passed by Congress in 1976 to address the problem of how to safely manage and dispose of municipal and industrial waste generated nationwide. RCRA creates a framework for the proper management of hazardous and non-hazardous waste. Federal regulations set a baseline standard with which everyone involved with hazardous wastes must comply. Frequently, states choose to adopt more stringent regulations than federal regulations.

RCRA addresses the "cradle to grave" management of hazardous waste. This includes the generation, storage, treatment, transportation and disposal of hazardous wastes. RCRA defines hazardous waste as a solid waste (including liquids and gases), or a combination of

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[1] Some of the wording in this section was adapted from a publication prepared by ENSR Consulting and Engineering, Acton, Massachusetts, entitled "A guide to Permitting, Compliance, Closure, and Corrective Action Under the Resource and Conservation Recovery Act", dated October 1990.

solid wastes which may, because of its quantity, concentration, or physical, chemical or infectious characteristics:

- cause or significantly contribute to an increase in mortality or in serious irreversible, or incapacitating illness; or
- pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Certain types of solid waste are excluded from regulation as hazardous waste. These include:

- household waste;
- solid wastes generated by growing crops or raising animals, and which are returned to the soil as fertilizers;
- mining overburden returned to the mine site;
- ash waste produced from the combustion of fossil fuels;
- wastes from oil, gas, and geothermal exploration, development, or production;
- certain wastes failing the toxicity characteristic test including discarded wood or wood products, and petroleum-contaminated media or debris;
- specific wastes from the extraction, beneficiation, and processing of ores and minerals; and
- cement kiln dust waste.

See 40 CFR 261.4 for the complete listing of exclusions.

Listed and Characteristic Hazardous Wastes. Under the current federal regulatory framework, a solid waste is considered a hazardous waste (and therefore subject to requirements of RCRA) if it is either a "listed" waste under 40 CFR Part 261 Subpart D , or a "characteristic" waste under 40 CFR part 261 Subpart C.

A waste is a listed waste if it comes from a process that was found to generate a "hazardous" waste (non-specific source wastes and specific source wastes), or if the waste is a commercial chemical product that has been discarded. Non-specific source wastes are generic wastes commonly produced by manufacturing and industrial processes and specific source wastes consist of wastes from identified industries such as wood preserving, petroleum refining, and organic chemical manufacturing. Commercial chemical products include such items as acetone, creosote, dichlorodiphenyltrichloroethane (DDT), methanol, and toluene. (Refer to 40 CFR Subpart D, Section 261.30-261.33 for listed wastes.

A characteristic waste exhibits any one or more of the following characteristics: ignitability, corrosivity, reactivity, or toxicity. The regulatory definition of hazardous waste appears in 40 CFR 261.20-261.24.

Special Wastes. Non-hazardous solid wastes require handling other than normally used (see 40 CFR 240.101). Special wastes are waste streams that do not come under RCRA, but may come under state hazardous waste requirements or under the Toxic Substance Control Act. States may choose to include items in their state hazardous waste regulations which are not considered hazardous wastes under RCRA.

State Identification and Listing of Hazardous Wastes. In addition to the RCRA hazardous wastes described in the Federal regulations, the Connecticut Department of Environmental Protection (DEP) added or modified the definition of certain hazardous wastes. (See CT Hazardous Waste Regulations 22a-449(c), Section 101.) Connecticut has also identified a number of non-hazardous regulated wastes. These include waste oil and waste polychlorinated biphenyls management.

3-3 Non-Hazardous Waste

For purposes of this plan non-hazardous wastes are wastes that are not considered

hazardous waste under Federal or state regulation. This would include such items as paper, cardboard, beverage containers, scrap metal (free of any residues), and woody debris.

3-4 Classification of Hazardous Waste Generators

Federal Definitions. The first step in the waste cycle is the generator. Under RCRA regulations, generators must determine if their waste is hazardous and must oversee the management and ultimate fate of the waste. RCRA identifies three different categories of hazardous waste generators. The generator definition is important because applicable waste management regulations vary for each type of generator. These categories are conditionally exempt small quantity generator (CESQG), small quantity generator (SQG), and large quantity generator (LQG). For general information, a summary of key RCRA criteria for CESQGs [40 CFR 261.5] and SQGs [40 CFR 262] are:

	Hazardous Waste Generation amount/month	Accumulation of Hazardous Waste maximum amount
CESQG	max. 100 kg (220 lbs)(~26 gal.)	1,000 kg (2,200 lbs)(260 gal.)
SQG	max. 1,000 kg (2,200lbs)(~ 260gal.)	6,000 kg (13,200 lbs)(~1,560 gal.)
	Acute Hazardous Waste Generation amount/month	Acute Hazardous Waste Generation maximum amount
CESQG	max. 1 kg (2.2 lbs)(1 quart)	max. 1 kg (2.2 lbs)(1 quart)
SQG	max. 1 kg (2.2 lbs)(1 quart)	max. 1 kg (2.2 lbs)(1 quart)
	Material from Cleanup of a Spill of Acute Hazardous Wastes amount/month	Material from Cleanup of a Spill of Acute Hazardous Wastes maximum amount
CESQG	max. 100kg. (220 lbs)(~26 gal)	max. 100kg. (220 lbs)(~26 gal)
SQG	max. 100kg. (220 lbs)(~26 gal)	max. 100kg. (220 lbs)(~26 gal)

LQG criteria can be found in 40 CFR 262.

State Definitions. Connecticut uses the same three generator category titles as the RCRA regulations. RCRA and Connecticut Regulations define LQGs the same, however their are minor differences in how CESQGs and SQGs are defined. The state requirements are more stringent than the Federal requirements.

CESQGs - According to RCRA's definition, a CESQG may accumulate no more than 100 kilograms of material from the cleanup of a spill of acute hazardous waste. Connecticut's definition adds that the limit must include no more than a total of one kilogram of acute hazardous waste contained in that material; and if non-hazardous waste is mixed and the mixture exceeds the quantity limitations established for CESQGs, the mixture will be subject to the full regulations of a SQG or LQG as applicable. [CT 22a-449(c)-101(a)(2)]

SQGs - As with the CESQGS, the limit on the accumulation of no more than 100 kilograms of material from the cleanup of a spill of acute hazardous waste must include no more than a total of one kilogram of acute hazardous waste contained in that material; and SQGs may accumulate no more than 1,000 kilograms of hazardous waste on site at any one time. [CT22a-449(c)-102(c)]

EPA Identification Number. Each project has been assigned an EPA federal facility identification number for reporting purposes. (See Appendix B.) These numbers were assigned to the projects in 1981. At that time the projects were identified as SQGs (federal generator definition). These numbers were issued by EPA to the Corps prior to the Federal Facilities Compliance Act, which was promulgated in 1992. Since the Federal Facilities Compliance Act, the federal projects in Connecticut are also required to meet the Connecticut requirements relating to hazardous waste laws and regulations.

Generator Category. Each project should be tracking and documenting, on an annual basis the amount of hazardous waste generated per month. This data can be used to document the project generator type. The determination should be redocumented each year. If the generator category changes or if other information regarding the facility requires updating, EPA and the state should be notified. Any actions to modify the generator status or facility information should be approved through the District office. When the EPA ID numbers were issued in 1981 all the projects were registered as SQGs.

Rules on Storing and Disposal of Hazardous Wastes. The project manager should ensure that the project is in compliance with both state and federal requirements for hazardous waste generators. In general, these requirements include properly storing and labeling hazardous waste, not exceeding accumulation time criteria, and using the manifest system to ensure that waste is sent by a licensed hauler to an EPA and state approved/permitted disposal facility, meeting record keeping and reporting regulations, and providing training to staff.

A comparison of RCRA generator requirements are included in the Environmental Assessment and Management (Team) Guide EC-95/05, page 4-3 and are detailed in the Code of Federal Regulations Title 40, Parts 260-266. Connecticut requirements are detailed in CT Hazardous Waste Regulations 22a-449(c)-100 through 110 and 22a-449(c)-11. For informational purposes the RCRA and state generator requirements are summarized on the following pages. For specific information of the generator requirements the project manager should refer to state and Federal regulations.

Comparison of RCRA - CESQG and SQG Generator Requirements (Source: EC/95/05)[2]

Requirement	RCRA CESQG	RCRA SQG
Identify Hazardous Waste	yes	yes
Facility Receiving Waste	State approved or RCRA permitted	RCRA permitted
EPA ID Number	Not Required	Required
RCRA personnel Training	Not Required	Required
DOT Training	Required	Required
Exception Report	Not Required	Required > 60 days
Biennial Report	Not Required	Not Required
Accumulation Time Limits	None	180 days
Use Manifests	No[3]	Yes
Storage Requirements	None	Comply with regulations

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[2] For LQG requirements see EC/95/05 or CFR Title 40, Parts 260-266.

[3] It is NAE policy that all hazardous waste be manifested regardless of the generator status.

Comparison of Connecticut Regulations - CESQG and SQG Generator Requirements (Source: Summary prepared from Guidance For Hazardous Waste Handlers, CT DEP. For full listing of generator requirements see Connecticut Hazardous Waste Regulations.)

Requirement	CT CESQG	CT SQG
Identify Hazardous Waste	yes	yes
Facility Receiving Waste	RCRA permitted	RCRA permitted
EPA ID Number	Suggested	Required
RCRA personnel Training	Suggested	Required
DOT Training	Required	Required
Exception Report	Not Required	Required > 60 days
Biennial Report	Not Required	Yes
Accumulation Time Limits	None	180 days
Use Manifests	Suggested[4]	Yes
Storage Requirements	Best Management Practices	Comply with regulations

[4] It is NAE policy that all hazardous waste be manifested regardless of the generator status.

MANAGEMENT OF WASTE STREAMS

4-1 Hierarchy of Solid Waste Management Options

The following is the hierarchy of solid waste management options for disposal of solid wastes as provided in the April 21 Memorandum from CECW-OA, SUBJECT: U.S. Army Corps of Engineers Facilities Environmental Compliance Guidance Letter No. 1, Waste Reduction and Recycling.

a. Source Reduction.

b. Recycling.

c. Disposal after treatment.

Although this Memorandum states that "Products of clearing, snagging, and debris removal from waterways and woody debris removal from land areas are not considered solid waste; therefore, USACE lands can be used for storage or disposal of such material", Connecticut Solid Waste Rules, Section 22a-209-2, prohibit open dumps. Thus NAE project lands in Connecticut should not be used for storage or disposal of such material.

4-2 Solid Waste Generators at Colebrook River Lake

Project Office. Generates high grade office paper, other recyclable paper (e.g. newspaper), containers (plastic, glass, metal), fluorescent lights and light ballasts (check for PCB in ballasts, bulbs contain mercury), household batteries, cardboard, and miscellaneous trash.

Garage attached to Project Office. The specialized storage room stores paint, oil and hazardous materials. (Approved flammable storage cabinets installed in 1994.)

Engineer Office. Stores boat, lawn mower, log boom chains, lime, fertilizer, project brochures, and supply of wood and other building materials.

Control Tower/Dam. Antifreeze, fuel oil and lubricants (hydraulic oil) used for the operation and

maintenance of the emergency generator, the heating unit, and the flood control gates. Equipment servicing is conducted by a contractor and residues are carried off-site by the contractor.

Log Boom. Generates woody debris, and other debris.

Project Lands. Generates trash illegally dumped at project - old tires, yard waste, furniture, etc. (access and reservoir roads are gated to prevent dumping of trash on project lands.)

Renovation/Construction at Project. Generates asphalt and building construction debris.

MANAGEMENT OF HAZARDOUS WASTE

5-1 General Requirements

The following is a general outline of hazardous waste management practices. For specific information please refer to the Connecticut Hazardous Waste Management Regulations or to the Connecticut Small Quantity Generator Guidance booklet included in Appendix C.

A separate collection, packaging and storage system should be established, so that all wastes are properly segregated, identified and labeled to facilitate disposal through a licensed contractor.

The use of materials which generate hazardous waste should be minimized. Hazardous materials should be purchased in minimal quantities for completion of the task at hand.

The hazardous waste should be stored in a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored in the container. The container must be Department of Transportation approved for highway transportation.

The hazardous waste storage area must meet the requirements of federal and state hazardous waste regulations. In general, the area must be identified by appropriate signs. The storage area floor must be impermeable, safety and emergency equipment must be available, and there must be adequate aisle space.

Throughout the period of storage or treatment, each container should be clearly marked and labeled in a manner which identifies, in words, the hazardous waste(s) being stored or treated in the container and the hazard(s) associated with the hazardous waste (e.g., ignitable, toxic, dangerous when wet). Each container should also be marked clearly with the words "Hazardous Waste". The period of storage should not exceed that allowed by the CT DEP.

The generating activity is responsible for preparation of containers and documentation for disposal and should comply with Department of Transportation (DOT) Regulations for Transportation of Hazardous materials. Containers must be accompanied by proper

documentation and any other information required by the contractor, such as Material Safety Data Sheets (MSDSs), laboratory analysis results, or waste profile data.

Hazardous waste should be disposed of through a licensed hauler and sent to a permitted facility. A hazardous waste manifest should accompany any materials and appropriate record keeping should be utilized. All records regarding hazardous wastes should be maintained for a minimum of 3 years.

Only those trained and formally authorized and designated by the District Commander are allowed to execute hazardous waste manifests and related documents. The formal designation and authorization must be in writing and must state that the employee is within their scope of employment when executing such documents. Record of the authorization should be kept on file. DOT manifest training must be current. Expiration of training will void formal designation authority. (See Appendix D.)

Inspections should be conducted at hazardous waste storage areas to monitor any spills and leaks.

Specific petroleum, oil, and lubricant handling requirements are included in the Spill Prevention, Control and Countermeasures Plan (SPCCP), and Spill Contingency Plan (SCP) for the project.

Medical wastes are covered under the State of Connecticut Solid Waste Management regulations, Section 22a-209-15, Biomedical Waste. These regulations apply to generators of biomedical waste. Any medical wastes at the project would have to be the result of illegal dumping. It is suggested that the following steps be taken if medical wastes are found on the project lands. Contact the local police department, the local board of health, and the CT DEP to determine the appropriate action to be taken. The Safety Officer at the District Office should also be notified regarding any medical wastes found on project lands. The area where the waste is located should be secured and posted as to the hazard. If determined to be appropriate by the officials, a state approved contractor should be retained to remove the waste from the site. The contractor should be someone with experience in dealing with medical wastes such as an ambulance service or a hospital. The medical waste may also be a RCRA listed or characteristic hazardous waste.

5-2 Specific Wastes.

Waste Oil. Waste oil is a "non-hazardous regulated waste" in Connecticut. However, if the waste oil has hazardous waste characteristics or has been mixed with a listed hazardous waste, then it is classified as a hazardous waste. Connecticut "non-hazardous regulated wastes" must be transported by a hazardous waste transporter licensed in Connecticut and it is suggested it be accompanied by a hazardous waste manifest.

Project automobiles are serviced off-site including oil changes. Any other services generating used oil conducted on-site are done by contractor and the contractor is responsible for waste oil disposal consistent with local, state, and federal regulations. (Information on proper handling of waste oil is also included in the Spill Prevention, Control, and Countermeasure Plan & Spill Contingency Plan.)

Used Oil Filters. Under the hazardous waste regulations, if a generator intends to dispose of used oil filters, the generator is required to determine whether the filter is hazardous waste and to dispose of it properly in accordance with regulations. There is an exception from hazardous waste requirements if the oil is removed form the filter and the filter is not lead plated.

Project automobiles are serviced off-site.

Cleaning Solvent. Degreasing solvents when disposed of are hazardous wastes. All degreasing of equipment at the project is done by a contractor.

Lead-Acid Batteries. Spent lead-acid batteries are considered a recyclable material under RCRA [40 CFR 261.6 and 266] and are not subject to hazardous waste regulations if they are recycled. In Connecticut, spent lead acid batteries are required to be recycled. Connecticut hazardous waste regulations have additional requirements for spent lead acid batteries awaiting recycling. [CT 22a-449(c)-106(c)] These are:

(1) Do not open, handle or store spent batteries in a manner which may rupture the battery case, cause it to leak or produce short circuits.

(2) Do not store spent batteries near incompatible materials unless they are protected from the other materials by means of a dike, berm, wall.

(3) Store spent batteries on an impervious surface and inspect weekly for leaks.

In Connecticut retailers who sell lead-acid batteries must accept a used battery for recycling in exchange for the purchase of a new battery.

Other Batteries. Eight metals are commonly used in batteries: mercury, cadmium, lead, zinc, manganese, nickel, silver, and lithium. Batteries should not be disposed of as miscellaneous refuse as they may be a hazardous waste. Some of the newly manufactured batteries may be below toxicity levels for hazardous waste.

Federal regulations provide for batteries to be recycled in compliance with the EPA standards for Universal Waste Management [40 CFR 273]. However, Connecticut has not yet adopted the Universal Waste Management option.

Antifreeze. According to Connecticut regulations, antifreeze is a recyclable non-RCRA hazardous waste if not contaminated with other hazardous constituents such as lead or benzene. A determination should be made as to whether or not any waste antifreeze generated at the project is considered a hazardous waste. If it is, the storage and disposal must comply with all state and federal hazardous waste regulations. In general, all vehicle or equipment maintenance is done off-site by a service garage or on-site by a contractor.

Surplus Paint and Allied Products. These may include oil-based paint, paint thinners, turpentine, varnishes, shellacs or polyurethane. Purchase of these products should be on an as needed basis. Any residues should be disposed of in accordance with state and federal hazardous waste regulations.

Pesticides/Herbicides. Careful selection, inventory and control of materials will help to reduce or eliminate their disposal. Any residues should be disposed of in accordance with state and federal hazardous waste regulations.

Treated Wood. Some wood is chemically treated to enhance its resistance to rot and insect damage. Treatment extends use from 3-5 years to 20-50 years or longer. The four most common mediums to treat wood are creosote, inorganic arsenical, pentachlorophenol (PC), and Copper Napthenate. Treated wood is not a "listed" hazardous waste under Federal

Regulations. However, it is subject to the Toxicity Characteristics Leaching Procedure (TCLP) to determine if the wood is a "characteristic" hazardous waste (40 CFR 261.24).

If the treated wood is determined to be a hazardous waste, it should be stored and disposed of in accordance with state and federal regulations.

Fluorescent Lights and Ballasts. These items are known to contain hazardous materials. They should not be disposed of as miscellaneous refuse. Light ballast may contain polychlorinated biphenyls (PCBs) and fluorescent lamps contain varying levels of mercury.

Ballasts containing PCBs are subject to the federal U.S. Toxic Substances Control Act and the federal regulations in Title 40 of the CFR part 761. Determine if the ballasts contain PCBs and if so comply with these regulations.

The EPA has not yet finalized disposal regulations associated with fluorescent lamps, although lamp disposal regulations have been proposed. Although not all light tubes will cause exceedences of the 0.2 mg/l mercury threshold value, the difficulty associated with obtaining a representative sample, variability of sampling data and cost of testing make it easier to discard used lights as hazardous waste rather than perform the analysis. (HTRW Fact Sheet No. 97-06 dated 14 April 1997.)

Similarly, Connecticut considers spent fluorescent lamps to be hazardous waste and subject to Hazardous Waste Regulations. Connecticut requires that generators ensure their lamps are transported to a facility permitted to accept such waste.[5]

Empty Containers. The federal regulations regarding residues of Hazardous Wastes is based on the definition of "empty". If the container is "empty", then the container is not subject to the hazardous waste regulations. However, a container is only considered empty if it meets the criteria in 40 CFR 661.7. The Connecticut definition of empty is the same as the Federal definition. The Federal criteria is summarized below.

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[5] Two lamp recycling facilities are Northeast Lamp Recycling, East Windsor, CT and Global Recycling Technologies, Stoughton, MA.

(1-i) All waste has been removed, that can be, using the practices commonly employed to remove materials from that type of container,

(1-ii) and no more than 2.5 centimeters of residue remain at the bottom of the container,

(1-iii) or no more than 3 percent by weight of the total capacity of the container remains in the container if the container is less than 110 gallons in size and no more than 0.3 percent by weight of the total capacity if the container is greater than 110 gallons in size.

(2) A compressed gas container that held a hazardous waste that is empty when the pressure in the container approaches atmospheric.

(3) If the container has held an acute hazardous waste then the container must be cleaned by triple rinsing, using a solvent capable of removing the product; or the container must be cleaned by another method that has been shown in the scientific literature to achieve equivalent removal.

MANAGEMENT OF NON-HAZARDOUS WASTE

6-1 General Requirements

There is a mandatory recycling regulation in the State of Connecticut (Titles 23a Regulation 22a-241b). All persons, businesses or institutions who generate solid waste are required to separate recyclable from non-recyclable material. A municipally registered hauler should be used to collect materials for delivery to a designated and approved recycling center. A hauler must inform municipalities when recyclable materials are found in the trash. A municipality may impose a fine up to $500 for each violation.

Items to be recycled include glass food and beverage containers, metal food and beverage containers, newspaper, corrugated cardboard, white office paper, leaves, scrap metal, waste motor oil, lead-acid batteries, and nickel-cadmium batteries. The last items listed are discussed in the hazardous waste section of this plan.

Miscellaneous /Recreational Waste Collection. The Colebrook River Lake project has 1 dumpster that is located on the Utility Building grounds the dumpster is emptied 1 time per week by Sanitary Services Corp. The project manager is responsible for assuring that recyclable items are not included in the trash.

6-2 Recyclable Waste

Beverage and Food Containers (glass and plastic bottles, aluminum cans). These items should be collected separately from miscellaneous refuse. Deposit and non-deposit containers should be recycled. See Appendix E for recycling information.

High Grade Office Paper/Newspapers/Cardboard/Mixed Paper. High grade paper is recyclable and should be collected in separate containers for recycling. Cardboard should also be recycled. See Appendix E for information and locations for recycling.

Scrap Metal. Scrap metal should be disposed of at a recycling center. See fact sheet in Appendix E for information.

Toner/Ink Jet Cartridges and Printer Ribbons. These items can also be recycled. Two companies in Connecticut are Inkwell, in Newington, CT and Flo-tech at 800-213-1112 ext.110. Flo-tech is a mail order company and deals primarily with purchase and recycling of toner cartridges for Hewllet Packard printers. Also consult the yellow pages for other possible recyclers.

6-3 Compostable Waste

Leaves/woody debris (yard waste)/woody log boom debris. Connecticut prohibits the landfill of yard waste or leaves. This waste should be composted on or off-site. Some woody debris may be relegated to the burn pile for burning when conditions permit. (This is to be coordinated with the local fire department.)

6-4 Non-recyclable Wastes

Miscellaneous refuse and non-recyclable paper. This waste should be picked up by a permitted contractor and disposed of properly by the contractor.

6-5 Difficult to Manage Wastes

Construction and Demolition. Construction and demolition (C&D) waste is debris generated from construction, renovation, repair, and demolition of roads, bridges, and buildings. It includes wood, steel, concrete, masonry, plaster, metal, and asphalt. These wastes have a number of beneficial uses, e.g. crushing asphalt and concrete/brick separately or in conjunction with virgin materials to produce recycled asphalt paving; process gravel, road base, and solid fill. Chipping and grinding wood treated with preservatives produces boiler fuel, a bulking agent for sludge composting; wood fiber, and erosion control for landfills. Untreated wood can be chipped for landscape and trail mulch.

At the project, the disposal of this material should be the responsibility of the construction contractor for any renovation project. The material should be required to be disposed of at a state approved C&D disposal facility. See Fact Sheet in Appendix E.

Tires. In Connecticut, used tires are generally burned for energy recovery. The recovery facility in Connecticut is called Exter Energy Limited Partnership located in Sterling.

Log Boom Debris. Items that float in the river, to the project area, are trapped by the log boom above the dam, so that the outlet at the dam will not be blocked. Items include tires, woody debris, sometimes 55 gallon drums with waste of unknown origin, and various other types of floating refuse. These items should be properly handled and disposed of or recycled, as appropriate.

White Metal Goods. White metal goods are household appliances which include refrigerators, water heaters, electric ranges etc. The preparation of discarded white metal goods for bulking may be done by a municipality, an appliance dealer or a processor. Be aware that refrigerators and air conditioners are likely to contain Chlorofluorocarbons (CFCs). CFCs are regulated under air pollution regulations. Also, white metal goods contain small capacitors which may contain PCBs. PCBs are regulated under TSCA regulations.

Ozone Depleting Substances (ODSs). It is the policy of the Corps to minimize the procurement of materials and substances that contribute to the depletion of stratospheric ozone; and give preference to the procurement of alternative chemicals and products that reduce the overall risks to human health and the environment by lessening depletion of ozone in the upper atmosphere. In addition, ODS "Elimination Plans" are to be developed for each project. ER-200-2-3 and EP 200-2-3 outlining this policy and program requirements are included in Appendix F.

Chlorofluorocarbons may be contained in air conditioners, water coolers, dehumidifiers, refrigerators and automobile air conditioners. CFCs are regulated under air pollution regulations. Individuals servicing and disposing of air conditioning and refrigeration equipment are prohibited from knowingly venting refrigerant into the atmosphere. At the flood control project these units are serviced off-site. The service contractor is required to provide documentation indicating that they are certified by EPA to deal with this material. Any new equipment purchased should maximize the use of safe alternatives to these ozone depleting substances.

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RESPONSIBILITIES

7-1 The District Environmental Coordinator

The Environmental Coordinator is responsible for the following items.

- Provide technical assistance and guidance to the project manager in developing environmentally safe procedures for solid waste management.
- Provide oversight of required permits and renewals and EPA hazardous waste generator application numbers.
- Review and approve Solid Waste Management Plan, revisions, and amendments.

7-2 The Project Manager [6]

The project manager is responsible for the following items.

- Program sufficient funds to insure compliance with solid waste management requirements.
- Maintain a complete and current inventory of stored materials and hazardous waste materials at the project.
- Assure that only those properly trained and designated by the District Commander will handle hazardous wastes at the project and sign hazardous waste manifests.
- Monitor facility compliance with hazardous waste manifest procedures and make recommendations for corrective actions or procedural changes when necessary or advisable.
- Maintain copies of all relevant regulations, directives, and guidance on hazardous

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[6] Environmental Compliance Coordinators are being hired for each river basin. One of their functions is to support field management of solid (including hazardous) wastes.

materials and wastes and petroleum, oil and lubricants at the project and keep these materials in an organized highly visible manner.

- Arrange for any testing of materials suspected of being hazardous wastes.

- Inspect storage areas for malfunctions and deterioration, operator errors, and discharges which may be causing, or may lead to the release of waste constituents into the environment or are a threat to human health. Inspections must be conducted to identify potential problems in time to correct them before a problem occurs.

- Assure reuse of recycled materials when possible and feasible. Appropriate disposal and recycling specifications should be included in purchase requests or contracts.

- Maintain material safety data sheets in the project office for staff to review.

- Review this Solid Waste Management Plan and make any necessary revisions to the Plan.

- Ensure there is a recycling program at the project.

TRAINING

8-1 Hazardous Waste Training

Training is an important component of regulatory compliance. Training should be carried out to ensure that all personnel working in facilities with hazardous wastes are knowledgeable of hazardous waste management requirements, emergency procedures, and spill reporting requirements.

Department of Transportation regulation 49 CFR 172.700 (Subpart H-training) requires the training of employees who load, unload or handle hazardous materials for transportation, assure the safety of the shipment, or operate a motor vehicle used to transport hazardous materials.

Only employees formally trained, designated, and authorized by the District Commander are allowed to execute hazardous waste manifests and related documents. Records of the designation should be kept on file. DOT manifest training must be current. Expiration of training will void formal designation authority. The formal designation and authorization must be in writing and must state the member is within their scope of employment when executing such documents. Each project unit should have at least one person formally designated, authorized and trained for this function.

All hazardous waste management training should be coordinated with the District Environmental Coordinator and Safety Officer.

8-2 Other Training

Although there is no specific training requirements for non-hazardous solid waste management, the project manager is encouraged to provide educational recycling information to employees for their information.

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GLOSSARY
TERMS AND ACRONYMS

CER - Code of Federal Regulations

Certification - A statement of professional opinion based upon knowledge and belief.

CFCs - Chlorofluorocarbons

Construction and Demolition Waste (C&D) - Construction and demolition waste (C&D) is debris generated from construction, renovation, repair, and demolition of roads, bridges, and buildings. It includes wood, steel, concrete, masonry, plaster, metal, and asphalt. These wastes have a number of beneficial uses, e.g. crushing asphalt and concrete/brick separately or in conjunction with virgin materials to produce recycled asphalt paving; process gravel, road base, and solid fill. Chipping and grinding wood treated with preservatives produces boiler fuel, a bulking agent for sludge composting; wood fiber, and erosion control for landfills. Untreated wood can be chipped for landscape mulch.

Container - A portable device in which a material or waste is stored, transported, treated, disposed of, or otherwise handled.

CWA - Clean Water Act

Disposal - The discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste or hazardous waste into or on any land or water so that such waste (or any constituent thereof) may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

DoD - Department of Defense

DOT - The United States Department of Transportation

ECC - Environmental Compliance Coordinator

EPA - The United States Environmental Protection Agency

Generator - A person who produces or creates hazardous waste identified or listed under RCRA (relating to criteria, identification, and listing of hazardous waste).

HSWA - Hazardous and Solid Waste Amendments of 1984 (to RCRA)

Hazardous Material - (1) A substance or material which has been determined by the Secretary of the U.S. Department of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been designated. (2) Is listed in 49 CFR, Part 172.101, Hazardous Materials Table.

High Grade Paper - Includes letterhead, dry copy papers, miscellaneous business forms, stationery, typing paper, tablet sheets, and computer paper.

Management - The entire process, or any part, of storage, collection, transportation, treatment, and disposal of hazardous wastes by persons engaging in such process.

Manifest - The shipping document EPA Form 8700-22, and if necessary, EPA Form 8700-22A, originated, signed, and distributed in accordance with the instructions supplied with the manifest form and applicable state requirements.

Manifest System - The manifest, instructions supplied with the manifest, and distribution system for copies of the manifest which together identify the origin, routing, and destination of hazardous waste from the point of generation to the point of treatment, storage or disposal.

NGVD - National Geodetic Vertical Datum-MSL of 1929.

ODSs - Ozone depleting substances

POL - petroleum, oil and lubricants

RCRA - Resource Conservation and Recovery Act of 1976. (P.L.94-580, as amended)

Resource Recovery - The process of obtaining materials or energy from solid waste.

Source Separation - The separation of recyclable materials at their point of generation by the generator.

Storage - The holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.

TCLP - Toxicity Characteristics Leaching Procedure

TSCA - Toxic Substance Control Act.

REFERENCES

Connecticut Department of Environmental Protection, Recycling Program. not dated. Business Recycling Fact Sheets.

ENSR Consulting and Engineering, Acton, Massachusetts. October 1990. "A guide to Permitting, Compliance, Closure, and Corrective Action Under the Resource and Conservation Recovery Act."

U.S. Army Corps of Engineers, Baltimore District. July 1993. POL Waste Liquid and Hazardous Waste Management Plan for Baltimore District, Project Operations Branch.

U. S. Army Corps of Engineers. February 1995. Hazardous Waste Management Manuals for U.S. Army Reserve Centers in the State of Connecticut, prepared with technical assistance from ENSR Consulting and Engineering.

APPENDIX A

TOWN ORDINANCES

TOWN OF COLEBROOK - BOARD OF SELECTMEN

"An Ordinance Regarding Solid Waste Disposal and Recycling"

It is hereby ordained, by the Town of Colebrook, in Town Meeting Duly Assembled:

Section I - Statement of Purpose

This Ordinance is hereby promulgated and adopted by the Town of Colebrook pursuant to Connecticut General Statutes Section 7-148 (c)(4)(H) and Chapter 446d, as amended, for the purpose of providing for the safe, efficient and sanitary disposal of solid waste generated within the Town and to provide for compliance by the Town's residents and authorized solid waste collector(s) with the requirements of said Chapter.

Section II - Definitions

For the purposes of this Ordinance and all regulations promulgated pursuant hereto, the following words and phrases shall have the meanings hereinafter set forth, which definitions shall be interpreted in accordance with Section 22a-241b-1 of Regulations of Connecticut State Agencies.

- Authorized Collector: Any person, corporation, or other entity

with whom the Town has contracted for the pickup, transportation and delivery of municipal solid waste and recyclables generated within the Town.

- Bulky Waste: Stoves or refrigerators with doors removed, bedsprings, mattresses, hot water tanks, furniture and other large household items which cannot be broken down, scrap lumber, pipe, masonry or other construction materials which are scrap or unwanted, exclusive of hazardous waste and yard waste.

- Designated Drop-Off Site: The situs, owned by an entity with whom the Town has contracted, where the Town's solid waste and recyclables shall be transported by the Authorized Collector for deposit.

- Dumpster: Metal receptacle designed to be lifted and emptied mechanically.

- Hazardous Waste: Any material which has been so-designated by the Federal Environmental Protection Agency or the State Department of Environmental Protection.

- Plastic: For purposes of this Ordinance shall include beverage containers, up to three (3) liters in size, made of Polyethylene Terephthalate (PET) and containers, up to one (1) gallon in size, made

of High Density Polyethylene (HDPE).

- Recyclable Material: Any material designated by the Board or elsewhere defined herein, as may be from time to time amended, which shall be segregated and diverted from other solid waste for collection in compliance herewith. Nothing in this Ordinance shall preclude the use of waste oil as fuel in an oil burner where otherwise permitted.

- Residential Premises: Any premises used primarily as a domestic dwelling, including single and multiple family homes and any other premises which may be designated as such in any regulations promulgated pursuant to this Ordinance.

- Scrap Metal: Means used or discarded items which consist primarily of ferrous metals, aluminum, brass, copper, lead, chromium, tin, nickel or alloys thereof.

- Solid Waste: Means solid, liquid, semi-solid or contained gaseous material, including recyclable material, generated in the Town that is unwanted or discarded exclusive of hazardous waste and yard waste.

- Tip Fee: Fee charged by the designated drop-off site for depositing solid waste, including recyclable material.

- Town: Town of Colebrook.

- Yard Waste: Grass clippings, leaves, horticultural trimmings or other such natural organic matter discarded from a residential yard or garden.

Section III - Recycling Program Established

A. There is hereby established within and for the Town of Colebrook a program for the segregation of recyclable materials from other solid waste applicable to all solid waste generating sources within the Town and for the sorting of such recyclable materials into categories as set forth in this Ordinance, as may be from time to time amended.

B. All persons, businesses, institutions and other entities which generate solid waste within the Town are required to separate recyclable materials from other solid waste in accordance with this Ordinance and any regulations which may be adopted by the Board of Selectman hereunder.

C. It shall be a violation of this Ordinance for any person, business, institution or other entity which generates solid waste within the Town to fail to make provision for separation therefrom of recyclable materials and for the pickup and removal thereof in accordance with the terms of this Ordinance, as may be from time to time

amended.

Section IV - Source Separation and Recycling

A. Recyclable materials separation.

(1) All persons, businesses, institutions and other entities which generate solid waste within the Town are required to separate recyclable materials from other solid waste. Solid waste placed for collection which contains recyclable materials shall not be collected by the authorized collector.

(2) The authorized collector shall make note of the name and address of any person who fails to separate recyclable materials as provided for above and report such non-compliance to the Board of Selectman or its designee.

(3) With regard to residential premises, all such recyclable materials, upon being separated from other solid waste, shall be placed on the curbside for collection in a town-supplied recycling container on the same day as garbage collection as designated by the authorized collector and approved by the Board of Selectmen.

(4) Businesses, institutions and other non-residential entities shall be responsible for implementing a system to provide for the separation of recyclable materials from other solid waste in

accordance with this Ordinance. Such non-residential entities shall also be responsible for arranging for the collection and transportation of recyclable materials separated in accordance herewith.

(5) Those businesses and institutions utilizing dumpsters in addition to or in lieu of curbside pickup shall comply with the provisions of Connecticut General Statutes Section 22a-241 et seq. as amended, all regulations promulgated thereunder and the provisions of this Ordinance, and shall be responsible for the cost of such dumpster(s).

B. Methods of Collection. Recyclable materials shall be placed for collection as set forth in Section IV.A. in the following manner. Materials not so placed shall not be collected.

(1) Clean, unsoiled newspapers and corrugated cardboard shall be packed, separately, in paper grocery or shopping bags or securely tied in flat bundles weighing not more than thirty (30) pounds and placed as designated herein.

(2) Unbroken glass food containers, as well as metal food containers, shall be rinsed out and placed as designated herein.

(3) Plastics as defined herein shall be rinsed out and placed as designated herein.

(4) Waste oil and antifreeze shall be placed in clean, leak-proof containers and set curbside for collection on day(s) so designated by the authorized collector and approved by the Board of Selectmen.

(5) Magazines and junk mail shall be packed or bundled in the same manner as newspapers and set curbside for collection on day(s) so designated by the authorized collector and approved by the Board of Selectmen.

(6) Batteries, tires, tire tubes, boxboard, beverage containers, and any other recyclable material(s) designated by the Board of Selectmen, shall be separated from other solid waste and set curbside for collection in a manner so as not to constitute a nuisance or otherwise be objectionable on day(s) so designated by the authorized collector and approved by the Board of Selectmen.

Section V - Authorized Collector

A. Contracts for Collection: Authority. The Town is authorized to award any necessary contract(s) for the collection, removal, transportation and disposal of solid waste generated within the Town limits. The contract(s) shall contain a provision that the work is to be carried out by any authorized collector awarded such a contract in a manner consistent with Federal, State and Local Laws.

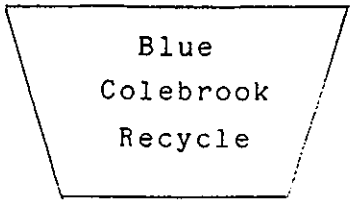
B. Items collectible pursuant to such contract(s) shall include solid waste, bulky waste and yard waste, but shall not include hazardous waste nor leaves.

C. All authorized collectors shall provide proof of adequate insurance to the Board of Selectmen prior to the Town awarding any contract. Proof of adequate insurance shall be provided thereafter on at least an arrival basis.

D. The authorized collector shall provide the Board of Selectmen or its designee a list of registration numbers and vehicle description of all vehicles which such approved collector will be operating in the Town pursuant to a contract.

E. The authorized collector shall provide pick-up services at least once a week for the following materials:

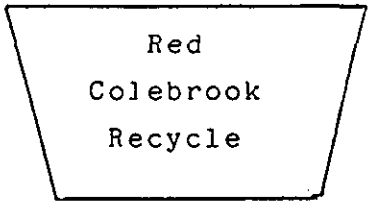
1. Household refuse;
2. Newspaper;
3. Corrugated cardboard;
4. Glass food containers;
5. Metal food containers;
6. Plastic as defined herein; and
7. Any other material so designated in any



regulation adopted hereunder or any amendment hereto.

F. The authorized collector shall provide pick-up services at least once a month for the following materials:

1. Waste oil;
2. Anti freeze;
3. Metal materials exclusive of scrap metal;
4. Magazines;
5. Junk mail;
6. Tires;
7. Tire tubes;
8. Automobile and dry cell batteries;
9. Box board; and
10. Any other material so designated in any regulation adopted hereunder or any amendment hereto.



G. The authorized collector shall provide pick-up services at least semi-annually for the following materials:

1. Bulky waste;
2. Scrap metal; and

3. Any other material so designated in any regulation adopted hereunder or any amendment hereto.

Section VI - Severability

A. In the event any provision, section, sentence, clause or part of this Ordinance shall be held invalid, illegal or unconstitutional, such invalidity, illegality or unconstitutionality shall not affect or impair any remaining part of this Ordinance, it being the intent that such remainder shall remain in full force and effect. Sections and captions contained herein are intended only for the purpose of convenient reference and are not intended to convey the intent of the Town.

Section VII - Inspection

The Town reserves the right to inspect solid waste at curbside or at the designated drop off site to determine compliance with this ordinance.

Section VIII - Fines

Any person, business, institution or other entity which violates or neglects to comply with this ordinance or any rules adopted hereunder shall be subject to a fine of One Hundred Dollars ($100.00)

per day for each day such violation continues.

TOWN OF COLEBROOK

PROPOSED AMENDMENT TO SOLID WASTE
AND RECYCLABLES ORDINANCE

IX. Pre-Existing Commercial Contracts

1. After the effective date of this ordinance no person, business, institution or other entity shall contract, nor renew any contract, with any non-authorized collector for the provision of solid waste collection services but shall be required to comply with all provisions of this ordinance as to exclusive provision of solid waste removal services by the Authorized Collector as provided herein.

2. Any hauler providing solid waste collection services to any business, institution or other non-residential entity within the Town of Colebrook pursuant to a contract which pre-exists this ordinance, hereinafter referred to as "Pre-existing Provider", shall be required on or before the 9th day of November, 1992, to register with the Town of Colebrook. Only haulers so registering shall be permitted to continue to provide such services within the Town for the remainder of any such pre-existing contract term.

3. As a prerequisite to registration with the Town, any pre-existing provider shall furnish the Town with a list of each vehicle it shall use to provide collection and removal services and shall use only such vehicles to provide such services.

4. As a prerequisite to registration with the Town, any pre-existing provider shall furnish the Town with proof of insurance on such vehicles in an amount not less than One Million Dollars ($1,000,000.00) combined single limit.

5. As a prerequisite to registration with the Town, any pre-existing provider shall furnish to the Town with the identity (name and address) of all customers with whom it has a pre-existing contract and the terminal date of each such contract.

6. A registration fee of $50.00 shall be charged for each vehicle registered by any pre-existing provider pursuant to this ordinance.

7. All pickups in the Town made by any such pre-existing provider shall be made only on the same day(s) as pickups are made in the Town by the Authorized Collector.

8. Any pre-existing provider shall comply with all provisions of this ordinance and Chapter 446d, as amended.

9. Any pre-existing provider shall abide by all traffic laws and regulations and shall comply with all federal, state and local laws and regulations.

10. Any pre-existing provider shall, at its sole cost and expense, provide all management, material, equipment, services, and supplies

necessary to carry out its obligations.

11. Any vehicle used by any such pre-existing provider shall be empty when it enters the Town to provide solid waste pickup and removal services and, upon completing pickups shall proceed directly to the designated drop-off site without making any pickups outside the Town.

12. Any pre-existing provider shall clean up any materials spilled during collection. Any pre-existing provider shall also be responsible for preventing spillage between the Town and the designated drop-off site. Disposal of any materials thus spilled and cleaned up shall be the responsibility of the Contractor.

REVOCATION OF PERMIT:

1. Permission to engage in refuse collection within the Town pursuant the above registration is a privilege, not a right. Failure to comply with the provisions of this Ordinance shall be grounds for revocation or suspension by the Town of any registration issued hereunder, in addition to any other penalty provided by law.

2. Revocation or suspension shall become effective seven (7) days after receipt of written notice of same from the Town.

3. If a pre-existing provider objects to the Town's action it shall, within seven (7) days of receipt of the aforesaid notice, file a

written request with the Town Clerk for review by the Board of Selectman. Failure to timely file such a request shall render the Town's action final and binding upon the pre-existing provider.

4. Timely filing of such a request for review shall operate as a stay of the Town's action pending the decision of the Board of Selectman.

5. The Board of Selectman shall act as an appeals board, and shall, within twenty (20) days of receipt of such a request for review, hear and decide the matter. The pre-existing provider shall be entitled to appear and be heard at such hearing. The decision of the Board of Selectman shall be final and binding upon the pre-existing provider.

COMPLAINTS AND NON-PERFORMANCE

The Town shall notify the Pre-existing Provider of each complaint pertaining to the Pre-existing Provider's service reported to the Town. The Town shall provide to the Pre-existing Provider a list of complaints received by the Town each collection day; it is the responsibility of the Pre-existing Provider to obtain this list from the Town each collection day at 3:30 p.m. either by telephone or personal visit to the designated Town office.

The Pre-existing Provider shall, within twenty four (24) hours

after receipt of each complaint, take all steps necessary to remedy the cause of the complaint and to notify the Town of each disposition. When a complaint is received on the day proceeding a holiday or weekend, it shall be serviced on the next working day.

The Pre-existing Provider shall provide the Town with a full explanation of the disposition of any complaint.

FINES

Failure to remedy the cause of the complaint within the time limits set forth herein shall be considered as a breach of the Contract. For the purpose of computing damages caused thereby under the provisions of this section, it is agreed that the Town may deduct from payments due or to become due to the Pre-existing Provider, for the following rates as liquidated damages:

1. Failure to clean up spilled recyclables.

Each incident fined at a rate of $50.00 per incident.

2. Failure or neglect to collect recyclables from any premises at those times as provided by this Contract within 24 hours.

Each failure or neglect of repeated instance at the same premises fined at the rate of $50.00 per incident.

3. If any load of recyclables is rejected at the designated

drop off site because of contamination, it will be the responsibility of the Pre-existing Provider to assume transportation and disposal costs for the rejected load. In addition, the Pre-existing Provider shall be fined by the Town for each load rejected at the rate of $100.00 per incident.

Amounts assessed for liquidated damages will be escalated over the term of the Contract consistent with the methodology specified in this document for increasing the amount of the contractor's unit prices.

APPENDIX B

U.S. EPA IDENTIFICATION NUMBERS FOR THE FLOOD CONTROL PROJECTS

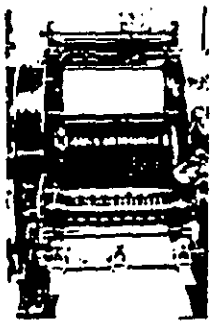
(List furnished by U.S.EPA)

FEB 1991

DISTRICT	INS #	INSTALLATION NAME	ST
NEW ENGLAND DISTRICT	00047	ANSONIA-DERBY LOC PROT	CT
	00048	CH BET NO&SO BROS ISLS	VT
	00049	CHATHAM STAGE HARBOR	MA
	00050	DEEP [illegible] PROTECTION	CT
	00051	DICKEY/LINCOLN SCH LAKE	ME
	00053	PAWTUXET COVE	RI
	00054	PLYMOUTH-LONG BEACH DIK	MA
	09607	MANSFIELD HOLLOW LAKE	CT
	09813	BIRCH HILL DAM	MA
	09814	CAPE COD CANAL	MA
	09815	KNIGHTVILLE DAM	MA
	09817	TULLY LAKE	MA
	09897	BLACKWATER RESERVOIR	NH
	09898	EDWARD MACDOWELL LAKE	NH
	09899	FRANKLIN FALLS RESERV	NH
	09900	SURRY MOUNTAIN LAKE	NH
	10143	UNION VILLAGE RESERVOIR	VT
	11421	KENNEBUNK RIV JETTY	ME
	12528	BALL MOUNTAIN RESERVOIR	VT
	12533	HOPKINTON-EVERETT LAKES	NH
	12535	NORTH SPRINGFIELD LAKE	VT
	12541	THOMASTON DAM	CT
	12542	TOWNSHEND LAKE	VT
	12565	HODGES VILLAGE DAM	MA
	12566	EAST BRIMFIELD LAKE	MA
	12567	SUFFIELD RESERVOIR	MA
	12568	BARRE FALLS RESERVOIR	MA
	12572	UTTER BROOK RESERVOIR	NH
	12580	NORTH HARTLAND LAKE	VT
	13528	WEST HILL DAM	MA
	13663	WESTVILLE LAKE	MA
	14726	LITTLEVILLE LAKE	MA
	14746	RELAY STATION BUILDING	MA
	15492	HANCOCK BROOK LAKE	CT
	15503	NORTHFIELD BROOK LAKE	CT
	15512	WEST THOMPSON LAKE	CT
	16060	CHICOPEE FALLS LOCAL PR	MA
	16061	CONANT BROOK DAM	MA
	16074	RELAY STATION BUILDING	CT
	16080	PT JUDITH BREAKWATER SI	RI
	19336	COLEBROOK RIVER LAKE	CT
	19337	HOP BROOK LAKE	CT
	19338	RELAY STATION BUILDING	VT
	19808	BLACK ROCK LAKE	CT
	19817	COLEBROOK RIVER LAKE	MA
	32394	CHARLES RIVER NVS	MA

APPENDIX C

STATE HAZARDOUS WASTE PROGRAM
SMALL QUANTITY GENERATOR



Are You A Small Quantity Generator Of Hazardous Waste?

If You Are In These Kinds Of Business, YOU May Be An SQG (Small Quantity Generator) . . .

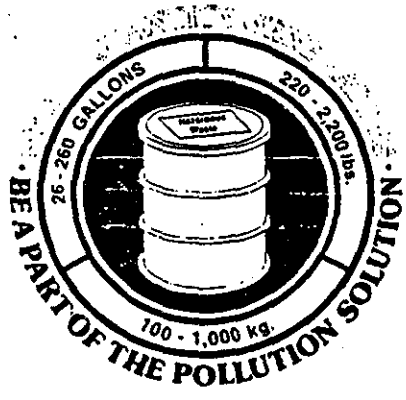
- Cleaning Agents & Cosmetics
- Construction
- Funeral Services
- Laboratories
- Laundries & Dry Cleaners
- Manufacturing – Textiles, Plastics, Leather, Chemicals, Furniture, Metal
- Pesticide End Users & Application Services
- Photo Processing
- Printing
- Vehicle Maintenance

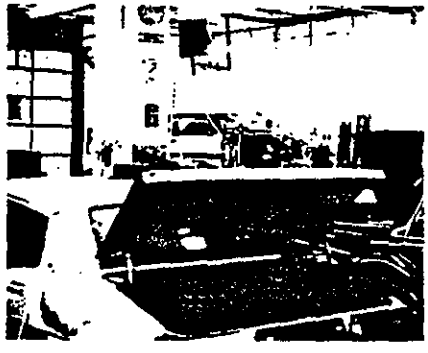
These Businesses Often Generate Hazardous Wastes Such As . . .

- Acids/Bases
- Cyanide Wastes
- Flammable Materials
- Heavy Metals/Inorganics
- Materials That Bubble or Fume on Contact With Water
- Materials That Burn or Itch Upon Contact With The Skin
- Pesticides
- Printing Inks, Paints, Dyes
- Solvents, Cleaning Fluids, Thinners

If You Generate 100 to 1000 Kilograms Per Month of Hazardous Waste, You Are A Small Quantity Generator. (If you generate less than 100 kilograms per month, you are a "Conditionally Exempt Small Quantity Generator")

If You Are A Small Quantity Generator You Are Required By Law To Properly Manage Your Wastes From "Cradle To Grave".





FOR MORE INFORMATION, CONTACT:

The Hazardous Waste Management Section

Connecticut Department of Environmental Protection
Hartford, Connecticut 06106
(203) 566-8844 or 5019

If You Are A 100-1000 Kg Per Month Small Quantity Generator In The State Of Connecticut You Must . . .

- Make a hazardous waste determination – which of your waste streams are hazardous?*
- Obtain a U.S. EPA Identification Number.
- NOT accumulate over 1000 kg of hazardous waste on site–unless you comply with the large generator (over 1000 kg) requirements.
- Submit an Annual Report to the State telling how much hazardous waste was generated during the year and where it went.
- Store your waste for no longer than 180 days before shipping it for treatment or disposal.
- Store your hazardous waste in the proper containers.*
- Properly label the containers.
- Plan for any emergencies that could occur.
- Post emergency telephone numbers and the location of emergency equipment.
- Train personnel about proper waste handling and emergency procedures.
- Use permitted waste transporters with EPA ID #'s.*
- Use permitted waste receiving facilities with EPA ID #'s.*
- Prepare wastes for shipment according to U.S. Department of Transportation requirements.
- Legibly and correctly fill out a Manifest and use it for each shipment off-site.
- Keep signed copies of manifest on file.

As a SQG, YOU are responsible for protecting public health and safety and the environment. By complying with the regulations, you will be doing just that.

*Also required for "Conditionally Exempt" SQG's

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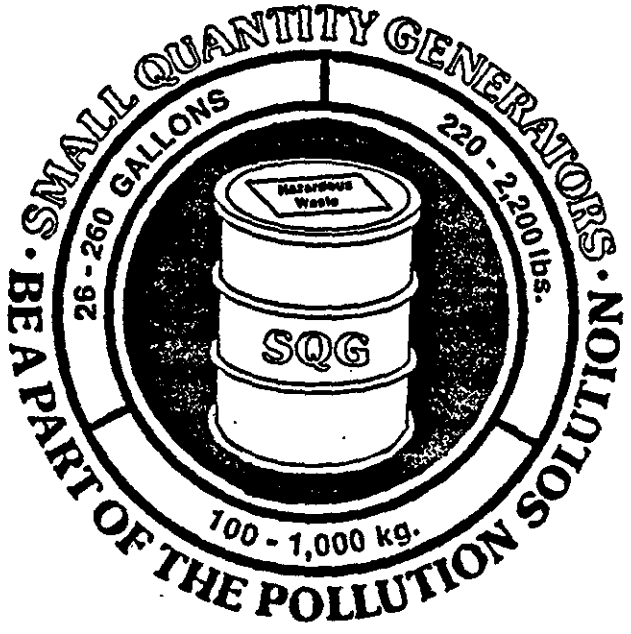
STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

79 Elm Street
Hartford, CT 06106
(203) 424-3023

Bureau of Waste Management

Small Quantity Generator Guidance

For Hazardous Waste Handlers



March 1, 1993
(Revised June 1, 1995)

SIDNEY J. HOLBROOK, COMMISSIONER

Preface

This guidance document does not and is not intended to replace or supersede either Regulations of Connecticut State Agencies ("RCSA"), Sections 22a-449(c)-100 through 110 and 22a-449(c)-11 (Hazardous Waste Management Regulations) or the Code of Federal Regulations Title 40 ("40 CFR"), Parts 260 through 271.

The State of Connecticut Department of Environmental Protection ("DEP") advises the regulated community not to rely solely upon the information presented in this guidance document, but to read all applicable regulations set forth in both the Regulations of Connecticut State Agencies, Sections 22a-449(c)-100 through 110 and 22a-449(c)-11 (Hazardous Waste Management Regulations) and the Code of Federal Regulations, Title 40, Parts 260 through 271, and to keep informed of all subsequent revisions or amendments to these regulations.

DEP encourages generators to contact the Waste Engineering and Enforcement Division with any questions regarding this guidance document or regarding the requirements for small quantity generators of hazardous waste. If, after reading these guidelines, you have questions or would like to obtain a copy of the Hazardous Waste Management Regulations or copies of other publications, please do not hesitate to contact the Bureau of Waste Management at the telephone numbers provided below.

	Telephone Numbers
State of Connecticut Department of Environmental Protection Waste Engineering and Enforcement Division Bureau of Waste Management	
• Enforcement & General Information District I (Northwest Connecticut) District II (Eastern Connecticut) District III (Southwest Connecticut) (Refer to Attachment 1: District Map of CT)	(203) 424-3023
• *Permitting & General Information*	(203) 424-3372
• Transporter Permitting & General Information	(203) 424-3372
• Manifest Ordering Information	(203) 424-3375

Acknowledgements

This guidance document is the result of the collaborative efforts of individuals from the Department of Environmental Protection and the Region I U.S. Environmental Protection Agency. Christie Flowers of the Waste Engineering and Enforcement Division of the Bureau of Waste Management authored, edited and coordinated production of this document. Other individuals also contributed substantially to its development by providing technical information and review, and their valuable contributions are gratefully acknowledged.

Connecticut Department of Environmental Protection
Waste Management Bureau
Waste Engineering and Enforcement Division

SMALL QUANTITY GENERATOR GUIDANCE
Table of Contents

TOPIC **PAGE NUMBER**

Attachments

Warning Placards and Labels

6. Examples of Potentially Incompatible Waste
7. Request for Change Form (Status Change)
8. Pollution Prevention Statement and Reference Sheet
9. Glossary of Acronyms and Terms

Executive Summary
of Small Quantity Generator Regulatory Requirements

A Small Quantity Generator ("SQG") is someone who generates between 100 and 1000 kilograms (220 and 2200 pounds or approx. 26 and 260 gallons) of hazardous waste per month, provided that the total amount of acute hazardous waste generated does not exceed 1 kilogram per month.

If you are an SQG, you must comply with the following hazardous waste management regulations:

o Perform a **Hazardous Waste Determination** to determine if your wastes are regulated as hazardous wastes.

o Notify of hazardous waste activity and obtain an **EPA Identification Number**.

o Properly manage your hazardous wastes at your facility by:

- **not accumulating greater than 1000 kg** (2200 lb) of hazardous waste on site;
- never accumulating hazardous waste on site for more than **180 days** (or for more than 270 days, if waste is to be transported >200 miles);
- **performing inspections** of your hazardous waste management areas (including containers and tanks) and of your safety and emergency equipment, recording the inspection results in a log, and taking prompt and immediate action to correct any deficiencies found;
- **preparing for an emergency** by designating an emergency coordinator, posting emergency information next to the telephone, and equipping your facility with the proper communication equipment and safety and emergency equipment;
- **training your employees** to ensure they are familiar with proper waste handling and emergency procedures; and
- **properly managing containers and tanks** used for the storage of hazardous waste.

o Ensure the proper off-site disposal of your hazardous waste by:

- **using only permitted transporters and permitted waste receiving facilities** which have EPA Identification Numbers;
- **preparing a uniform hazardous waste manifest** to accompany your off-site shipment of waste;
- complying with **Land Disposal Restriction** requirements; and
- **packaging, labeling, marking, and placarding** your waste in accordance with DOT requirements before offering it for transport.

o **Maintain proper records** to document your hazardous waste management activities and **submit Biennial Reports** to the State.

o Make a good faith effort to **minimize your waste generation and to select the best waste management method** that is available to you that you can afford.

Purpose and Structure of Guidance Document

Purpose: The purpose of this guidance document is to clarify the regulatory requirements for Small Quantity Generators ("SQGs") pursuant to the July 17, 1990 revision of Connecticut's Hazardous Waste Management Regulations (Regulations of Connecticut State Agencies ("RCSA") Sections 22a-449(c)-100 through 110). In the 1990 regulatory revision, Connecticut incorporated all of the federal requirements for SQGs, as set forth in Title 40 of the Code of Federal Regulations ("40 CFR"). In some cases, Connecticut's regulations for SQGs are more stringent. Such instances are described in this guidance document.

Document Structure: This guidance document is comprised of four major sections: A. Small Quantity Generator Definition; B. Regulatory Requirements Applicable to Small Quantity Generators; C. Episodic Generators of Hazardous Waste; and D. Waste Minimization and Pollution Prevention. A one page executive summary of the SQG requirements is also included and there are a number of attachments which provide additional information and examples for your use or reference. For your quick reference, Attachment 9 provides a Glossary of Acronyms and Terms.

For your ease of use and reference, the following example explains the structure of the Section B. Regulatory Requirements:

Example:

Requirement---> **1. Hazardous Waste Determination**

DEP Regulation Citation---> **RCSA 22a-449(c)-102(a)**
Federal Regulation Citation---> **40 CFR 262.11**

The paragraph or text immediately following the section title will provide a summary of the regulatory requirement (in some cases the regulatory language may be used directly).

Discussion
The "Discussion" section may:

- *highlight areas where Connecticut's regulations are more stringent or the same as EPA's (Federal) requirements;*
- *indicate points of contact and/or provide phone numbers to obtain additional information, forms, etc.;*
- *specify recordkeeping requirements applicable to the section;*
- *further explain the regulatory requirement; and/or*
- *suggest "best management practices".*

A. Definition

Small Quantity Generator ("SQG")

RCSA 22a-449(c)-100(c) and -102(c)(1)
RCSA 22a-449(c)-100(b)(1)(B)[1]

A generator is a small quantity generator in a calendar month if he generates more than 100 but less than 1000 kilograms (between 220 and 2,200 pounds or approximately 26 to 260 gallons) of hazardous waste in that calendar month, provided that such waste does not include more than:

(a) a total of one kilogram of acute hazardous wastes listed in 40 CFR Sections 261.31, 261.32, or 261.33(e); or

(b) a total of 100 kilograms of any residue or contaminated soil, waste, or other debris resulting from the clean up of a spill, into or on any land or water, of any acute hazardous wastes listed in 40 CFR Sections 261.31, 261.32, or 261.33(e), provided that there is no more than a total of one kilogram of acute hazardous waste contained in that residue, soil, waste or debris.

CONVERSION CHART

KILOGRAMS	POUNDS	GALLONS *	55 GAL. DRUMS
100 kg	220 lbs.	≈ 26 gal.	≈ 1/2 drum
1000 kg	2200 lbs.	≈260 gal.	≈ 3 to 5 drums

* The gallon equivalents will vary according to the density (weight per volume, e.g., lbs./gal) of your waste.

Discussion

As Connecticut limits accumulation on-site at any one time to 1000 kilograms, Connecticut's definition is more stringent than the Federal requirements. (Refer also to Section 3 "Accumulation Amount".)

Connecticut regulates any handler who generates greater than one kilogram of acute hazardous waste contained in a residue, soil, waste, or debris, resulting from the clean up of a spill, as a large quantity generator ("LQG").

For generators who do not generate hazardous waste at a uniform or consistent rate, please refer to the discussion of "Episodic Generator" in this document.

Pursuant to RCSA Section 22a-449(c)-100(b)(1)(B), Connecticut does not incorporate the federal SQG definition in 40 CFR 260.10.

B. Regulatory Requirements Applicable to Small Quantity Generators

RCSA Section 22a-449(c)-102(c)(2) states that SQGs are required to meet all requirements applicable to LQGs unless specifically excluded. As this language has caused some confusion within the regulated community, this section of the guidance document outlines regulatory requirements applicable to SQGs in Connecticut.

1. Hazardous Waste Determination

RCSA 22a-449(c)-102(a)
40 CFR 262.11

A person who generates a solid waste, as defined in 40 CFR 261.2, must determine if that waste is a hazardous waste using the methods specified in 40 CFR 262.11. In short,

- first you must determine if the waste is excluded from regulation under 40 CFR 261.4. If the material is not excluded,
- then you must determine if the waste is listed as hazardous in Subpart D of 40 CFR Part 261. If the waste is not listed in Subpart D of 40 CFR Part 261,
- then you must determine if the waste is identified in Subpart C of 40 CFR Part 261 by either testing the waste in accordance with Subpart C of 40 CFR Part 261 (or 40 CFR 260.21) or by applying knowledge of the hazard characteristic of the waste in light of the materials or processes used.

Discussion

Connecticut's hazardous waste determination requirements are the same as the Federal and are the same for both SQGs and LQGs.

A generator must keep records of any test results, waste analyses, or other determinations made in accordance with 262.11 for at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal. (40 CFR 262.40(c))

If hazardous waste determinations are performed by applying knowledge, it is highly advisable that the generator retain on-site in his files all supporting data used to make this determination. Connecticut may require this by regulation in the future.

Connecticut has available copies of excerpts from 40 CFR 261 Subparts C and D-- (Characteristics and Lists of Hazardous Wastes). To obtain a copy, please contact DEP using one of the District telephone numbers listed in the Preface of this document.

2. EPA Identification Numbers

RCSA 22a-449(c)-102(a)(1)
40 CFR 262.12

A generator must not treat, store, dispose of, transport, or offer for transportation, hazardous waste without having received an EPA Identification Number from the Commissioner.

A generator who has not received an EPA Identification Number may obtain one by applying to the Commissioner using EPA Form 8700-12 (Notification of Regulated Waste Activity). Upon receiving the request the Commissioner will assign an EPA Identification Number to the generator.

A generator must not offer his hazardous waste to transporters or to treatment, storage, or disposal facilities that have not received an EPA Identification Number. (Please refer to Section 14: Use of Permitted Transporters for guidance on the selection of a transporter and refer to Attachment 2 for guidance on the selection of a treatment, storage or disposal facility.)

Discussion
This requirement is the same as the Federal requirement and is the same requirement as that for an LQG.

A generator may obtain an EPA Form 8700-12 (Notification of Regulated Waste Activity) by contacting the DEP Waste Engineering and Enforcement Division at (203) 424-3372.

There may be a slight time delay in processing your application and assigning your permanent Identification Number. Should you need to ship wastes off-site during the interim time period, you may obtain a 'Temporary' Identification Number by contacting the DEP at (203) 424-3372. Please note: Temporary Identification Numbers are only issued by the Department between the hours of 9:00 a.m. and 12:00 noon on Mondays, Wednesdays, and Fridays. Temporary Identification Numbers are effective for a 6-month time period.

3. SQG Accumulation Amount/Accumulation Time

RCSA 22a-449(c)-102(a)(1), -102(a)(2)(F) and -102(a)(2)(G)
40 CFR 262.34(d)(1), 40 CFR 262.34(e) and 40 CFR 262.34(f)

A Small Quantity Generator may accumulate hazardous waste on-site for 180 days or less (or for 270 days, if the waste is to be transported over a distance of 200 miles for off-site treatment, storage or disposal) provided that the quantity of waste never exceeds 1000 kilograms (or 2200 pounds). An SQG who accumulates hazardous waste in quantities exceeding 1000 kilograms is a Large Quantity Generator of hazardous waste and must comply with all regulatory requirements applicable to large quantity generators.

CONVERSION CHART

KILOGRAMS	POUNDS	GALLONS *	55 GAL. DRUMS
100 kg	220 lbs.	≈ 26 gal.	≈ 1/2 drum
1000 kg	2200 lbs.	≈260 gal.	≈ 3 to 5 drums

* The gallon equivalents will vary according to the density (weight per volume, e.g., lbs./gal) of your waste.

Discussion

As Connecticut limits on-site accumulation to 1000 kilograms, the State requirements are more stringent than the Federal (which allow up to 6000 kilograms to be accumulated on-site during a 6-month period). Because Connecticut limits accumulation to only 1000 kilograms, should an SQG exceed this 1000 kilogram amount (but not exceed 6000 kilograms), the SQG will be operating as a large quantity generator. Large quantity generators may not accumulate hazardous waste on-site for more than 90 days. If greater than 1000 kilograms of hazardous waste are accumulated on-site for greater than 90 days, the generator is the operator of a storage facility and is subject to the requirements of 40 CFR Parts 264 and 265 and the permit requirements of Part 270.

And, if an SQG accumulates hazardous waste in quantities exceeding 6000 kilograms or if an SQG accumulates hazardous waste for a time-frame exceeding 180 (270) days, by Federal regulation, the generator is also the operator of a storage facility and is subject to the requirements of 40 CFR Parts 264 and 265 and the permit requirements of Part 270. (The generator may apply for an extension of up to 30 days if hazardous wastes are to remain on-site for longer than 180 days (or, 270 days) due to unforeseen, temporary, and uncontrollable circumstances. If the generator finds it necessary to apply for an extension, such requests must be made in writing before the 180 day (270 day) accumulation period has expired. Extensions may be granted at the discretion of the Commissioner on a case-by-case basis.)

4. Manifest

RCSA 22a-449(c)-100(c) (Definition)
RCSA 22a-449(c)-102(a), 22a-449(c)-102(b)(3)
40 CFR 262.20(a)-(d) and 40 CFR 262.21, 22, and 23

A generator who transports, or offers for transportation, hazardous waste for off-site treatment, storage, or disposal must prepare a manifest. (An example of a properly completed manifest is provided in Attachment 3.)

Discussion

Connecticut's manifest requirements are more stringent than the Federal regulations. Connecticut uses an eight-part manifest form; generators must complete "optional" information items A-K in accordance with manifest instructions. SQGs must comply with all manifest requirements applicable to LQGs. In Connecticut, SQGs are not given an exemption from manifesting requirements if they have a contractual agreement with a reclaimer.

A generator must keep a copy of each manifest signed in accordance with 262.23(a) for three years or until he receives a signed copy from the designated facility which received the waste. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial transporter. (40 CFR 262.40(a))

Generators may obtain manifest forms for their use by contacting the DEP Waste Planning and Standards Division at (203) 424-3375.

5. Land Disposal Restrictions

RCSA 22a-449(c)-108
40 CFR Part 268

The Land Disposal Restriction ("LDR") requirements identify hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed.

Discussion

LDR requirements for LQGs and SQGs are the same. Generators are urged to read these regulations. An EPA document entitled "Land Disposal Restrictions: Summary of Requirements" is available from DEP and provides a brief summary of these regulations.

6. Recordkeeping and Reporting

Recordkeeping and Reporting Requirements for SQGs include those requirements for recordkeeping, biennial reporting, exception reporting, and additional reporting.

6.1 Recordkeeping

RCSA 22a-449(c)-102(a)(2)(I) and -102(c)(2)
40 CFR 262.44(a) and 40 CFR 262.40

SQGs have specific recordkeeping requirements for Manifests, Biennial Reports, Exception Reports, and Hazardous Waste Determinations. The specific requirements are detailed in the respective discussion sections of this guidance document.

The periods of retention referred to above are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Commissioner.

6.2 Biennial Reporting

RCSA 22a-449(c)-102(a)(2)(H) and (I)
40 CFR-262.44 and 40 CFR 262.41

A generator who ships any hazardous waste off-site to a treatment, storage or disposal facility within the United States must prepare and submit three copies of a Biennial Report to the Commissioner by March 1 of each even numbered year. The Biennial Report must be submitted on a form prescribed by the Commissioner.

Discussion
This reporting requirement for SQGs is more stringent than the Federal requirement and is the same requirement as that for LQGs. However, the SQG Biennial Report form is a much simpler form than that for LQGs.

A generator must keep a copy of each completed Biennial Report for a period of at least three years from the due date of the report. (40 CFR 262.40(b))

6.3 Exception Reporting (Manifest)

RCSA 22a-449(c)-102(a)(1) and -102(a)(2)(I)
40 CFR 262.42(b) and 262.44(a)-(b)

An SQG who does not receive a copy of the manifest with the hand-written signature of the owner or operator of the designated facility within 60 days of the date the waste was accepted by the initial transporter must submit a legible copy of the manifest, with some indication that the generator has not received confirmation of delivery, to the Commissioner.

Discussion

Connecticut's exception reporting requirements are the same as the Federal requirements for SQGs (one exception is noted below)--both of which are less stringent than those for LQGs in that SQGs have 60 days to report exceptions, while LQGs have only 35 days. However, Connecticut is more stringent in that SQGs must retain copies of exception reports for a period of three years from the due date of the report. (40 CFR 262.40(b))

6.4 Additional Reporting

RCSA 22a-449(c)-102(a)(2)(I) and -102(c)(2)
40 CFR 262.44(c) and 40 CFR 262.43

The Commissioner may require generators to furnish additional reports concerning the quantities and disposition of wastes identified or listed in 40 CFR Part 261. (Generators must furnish such additional reports as requested by the Commissioner.)

7. General Inspection Requirements

RCSA 22a-449(c)-102(b)(2)
40 CFR 265.15

22a-449(c)-102(a)(1)
40 CFR 262.34(a)(1)
40 CFR 265.174 (Containers)
40 CFR 265.195 (Tanks)

22a-449(c)-102(c)(2)

In summary, a generator must:

(a) Inspect his facility for any deficiencies which may cause or lead to a release of hazardous waste or may pose a threat to human health;

(b) Develop and follow a written schedule for inspecting all of the following:
- monitoring equipment
- safety and emergency equipment
- security devices
- operating and structural equipment
- containers
- container storage areas
- containment systems
- tanks and ancillary equipment
- loading and unloading areas.

The written inspection schedule must:

- Be kept at the facility;
- Identify the types of problems to be looked for during an inspection; and
- Specify the frequency of inspection for all items on the schedule. (At a minimum, containers, container storage areas, containment systems, and battery storage areas must be inspected weekly; tanks and loading/unloading areas subject to spills must be inspected daily; and, it is advised that safety and emergency equipment be inspected at least monthly.)

(c) Remedy any deterioration or malfunction of equipment or structures which the inspection reveals;

(d) Record inspections in an inspection log or summary.

Discussion
Connecticut's inspection requirements for SQGs and LQGs are more stringent than EPA's.

In devising an inspection log format, the generator should be aware that the inspection summary must include the date and time of the inspection, the name of the inspector, a notation of observations made, and the date and nature of any repairs or other remedial actions. It is highly advised that the inspection log enumerate all

items to be checked during an inspection; this would help to ensure consistency of inspections and help to ensure that no items or potential problems are overlooked during an inspection. For your assistance, a Sample Log Format is included in Attachment 4; you may use this Sample as a model in developing an inspection log specific to your facility.

Also included as Attachment 4 is a 'List of Equipment, Structures, Areas to be Considered for Inclusion in an Inspection Schedule'; this may also be of use to you in developing your inspection plan.

8. Emergency Planning

RCSA 22a-449(c)-102(a)(1)
40 CFR 262.34(d)(5)

The generator must comply with the following emergency planning requirements:

(a) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified below. This employee is the "emergency coordinator".

(b) The generator must post the following information next to the telephone:

- The name and telephone number of the emergency coordinator;
- Location of fire extinguishers and spill control material, and, if present, fire alarm; and
- The telephone number of the fire department, unless the facility has a direct alarm.

(c) The emergency coordinator or his designee must respond to any emergencies that arise. The applicable responses are as follows:

- In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;
- In the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;
- In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include the following information:
  - o The name, address, and U.S. EPA Identification Number of the generator;
  - o Date, time, and type of incident (e.g., spill or fire);
  - o Quantity and type of hazardous waste involved in the incident;
  - o Extent of injuries, if any; and
  - o Estimated quantity and disposition of recovered materials, if any.

Discussion
Connecticut's emergency planning requirements are the same as the Federal; these requirements are less stringent than those for LQGs as no formal written contingency plan is required for SQGs.

Generators are advised to post emergency information next to each telephone in their facility--most importantly, next to all telephones located in waste handling areas.

9. Personnel Training

RCSA 22a-449(c)-102(a)(1)
40 CFR 262.34(d)(5)(iii)

The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

Discussion

Connecticut's personnel training requirements are the same as the Federal requirements. As no written records are required, these requirements are less stringent than the LQG requirements.

10. Preparedness and Prevention

RCSA 22a-449(c)-102(a)(1)
40 CFR 262.34(d)(4)
40 CFR 265 Subpart C

In summary, a generator must:

(a) Maintain and operate the facility to minimize the possibility of fire, explosion, or any releases;

(b) Equip the facility with:

- internal communications or alarm system to provide immediate emergency instruction to facility personnel;
- a telephone (immediately at the scene of operations) or a hand-held two-way radio, capable of summoning assistance from local authorities;
- portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment; and
- water at adequate volume and pressure, or foam producing equipment, or automatic sprinklers, or water spray systems.

(c) Test and maintain all equipment to assure its operation in time of emergency;

(d) Provide immediate access to internal alarms or emergency communication devices to facility personnel involved in hazardous waste handling operations;

(e) Maintain aisle space to allow unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency; and

(f) Attempt to make arrangements with police and fire departments, State and local emergency response teams, emergency response contractors, and local hospitals.

Discussion
This requirement is the same as the Federal requirement and is the same as the requirement for LQGs.

11. Pre-Transport Requirements

RCSA 22a-449(c)-102(a)(1) and -102(c)(2)
40 CFR 262 Subpart C (262.30, 31, 32, 33)

Before transporting hazardous waste or offering hazardous waste for transport, generators must package, label, mark and placard the waste in accordance with the applicable Department of Transportation ("DOT") regulations under 49 CFR Parts 172, 173, 178, and 179.

Discussion

Connecticut requires SQGs to comply with pre-transport requirements applicable to LQGs; this is more stringent than Federal requirements.

Attachment 5 provides examples of properly completed hazardous waste markers for containers of listed and characteristic hazardous wastes. Attachment 5 also provides summary guides to DOT Hazardous Materials Warning Placards and DOT Hazardous Materials Labels. You are urged to keep informed of any changes in DOT regulations.

12. Use and Management of Containers

RCSA 22a-449(c)-102(a)(1), -102(a)(2)(B), -102(a)(2)(C), and -102(c)(2)
40 CFR 262.34(d)(2), 262.34(d)(4), 262.34(a)(2)-(3)
40 CFR 265 Subpart I, 40 CFR 264.175

Generators must comply with the following management requirements for containers holding hazardous waste:

(a) Ensure that containers holding hazardous waste are in good condition and are not leaking. (If a hazardous waste container is leaking or is otherwise in poor condition (bulging, rusted/corroded, etc.), the contents of the container should be transferred to a container that is in good condition or the container should be managed in some other way that complies with the regulations.)

(b) Ensure that containers holding hazardous waste are made of or lined with material which will not react with or are otherwise compatible with the waste to be stored. If the waste is incompatible with the container, the ability of the container to contain the waste may be impaired.

(c) Ensure that containers holding hazardous waste are closed during storage, except when it is necessary to add/remove waste.

(d) Ensure that containers holding hazardous waste are not opened, handled, or stored in a manner which may cause the container to rupture or leak.

(e) Ensure that containers holding hazardous waste and areas where containers are stored are inspected on a weekly basis. Containers should be inspected for at least the following:

- o Leaks,
- o Deterioration caused by corrosion or other factors,
- o Compliance with the Hazardous Waste Management Regulations:
  - ▸ Are the containers closed?
  - ▸ Are the containers marked?
  - ▸ Does the marker include the words "Hazardous Waste" and other words to identify the contents, such as the chemical name?
  - ▸ Are the markers legible?
  - ▸ Are the markers visible for inspection?
  - ▸ Are the containers marked with a date of accumulation?
  - ▸ Have the containers been on-site >180 days?
  - ▸ Does the amount of waste on-site exceed 1000 kilograms?
  - ▸ Is adequate aisle space maintained between containers?
  - ▸ Are the containers stored on an impermeable base and within a berm?
  - ▸ Are there cracks in the base or berm?
  - ▸ Is there evidence of spills or other accumulation in the berm?
  - ▸ Are incompatible wastes/materials separated by means of a dike, wall, or berm?
  - ▸ and so forth ....

(And, the generator must comply with all other applicable inspection requirements; refer to Section 7: General Inspection Requirements. Attachment 4 provides a Sample Inspection Log for Hazardous Waste Containers.)

(f) Ensure that containers holding hazardous waste are managed in compliance with the special requirements for incompatible wastes. The purpose of such special requirements is to prevent the potential for fire, explosion, gaseous emission, or other discharge of hazardous waste which could result from the mixing of incompatible wastes or materials or which could result if containers break or leak. Special requirements include:

- Incompatible wastes or incompatible wastes and materials must not be placed in the same container. (Attachment 6 provides Examples of Potentially Incompatible Waste (40 CFR Part 265 Appendix V).)

- Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material.

- A storage container holding a hazardous waste that is incompatible with any waste or other material stored nearby in other containers, piles, or open tanks must be separated or protected from the other materials by means of a dike, berm, wall or other device.

(g) Ensure that containers holding hazardous waste are stored on an impermeable base which is bermed to prevent leakage in case of a spill or release. The base must be free of gaps or cracks and must be sufficiently impervious to contain leaks, spills and accumulated precipitation until the collected material is detected and removed. Collected material must be removed in a timely manner to prevent overflow; collected material must be managed and disposed of in accordance with all applicable Federal, State, and local regulations (i.e., if the collected material is a hazardous waste, it must be managed in accordance with the Hazardous Waste Management Regulations.)

(h) Ensure that containers holding hazardous waste are clearly marked with the date upon which each period of accumulation begins and are clearly marked with the words "Hazardous Waste" and other words that identify the contents of the container, such as the chemical name. Such markings must be legible and visible for inspection on each container.

Discussion

For the most part, SQGs must comply with the same container management requirements as LQGs. Connecticut has additional marking requirements above those required by EPA and Connecticut requires SQGs to comply with secondary containment requirements. In both these aspects, Connecticut is more stringent than EPA.

13. Tank Systems

RCSA 22a-449(c)-102(a)(1), -105(a)(1)(C)-(D), -105(a)(2)(I) and -105(e)
40 CFR 262.34(a)(1), 262.34(a)(3), 262.34(d)(3)-(d)(4) and 265.201

Generators must comply with General Operating Requirements for Tanks, Inspection Requirements for Tanks, Special Requirements for Ignitable or Reactive Waste, and Special Requirements for Incompatible Wastes.

And, while being accumulated on-site, each tank must be labelled or marked clearly with the words "Hazardous Waste" and other words that identify the contents of the tank, such as the chemical name.

General Operating Requirements

(a) Management of hazardous waste in a tank must be conducted such that:

- extreme heat or pressure, fire or explosion, or violent reaction are not generated;
- uncontrolled toxic mists, fumes, or dusts in sufficient quantities to threaten human health or in sufficient quantities to pose a risk of fire or explosions are not produced;
- structural integrity of the device or facility containing the waste is not damaged; or
- human health and the environment is not threatened through other like means.

(b) Hazardous wastes or treatment reagents must not be placed in a tank if they could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life.

(c) Where hazardous waste is continuously fed into a tank, the tank must be equipped with a means to stop this inflow, such as a waste feed cutoff system or by-pass system to a stand-by tank. (This system is intended to be used in the event of a leak or overflow from the tank due to a system failure (e.g., malfunctions, cracks, etc.).)

Inspection Requirements

(a) Daily Inspections must be performed for each of the following, where present:

- discharge control equipment, such as waste feed cutoff systems, bypass systems, and drainage systems, to ensure that all such equipment is in good working order;
- data gathered from monitoring equipment, such as pressure and temperature gauges, to ensure the tank is being operated according to its design; and
- level of waste in the tank.

(b) Weekly Inspections must be performed for each of the following, where present:

- construction materials of the tank to detect corrosion or leaking of fixtures or seams and

- construction materials of the discharge confinement structures (e.g., dikes) and the areas immediately surrounding these structures to detect obvious signs of leakage (e.g., wet spots or dead vegetation).

Closure Requirements

Upon closure of the facility (or discontinuing the use of a tank for the management of hazardous waste), the generator must remove all hazardous waste from the tank, from the discharge control equipment, and from the discharge confinement structures. Any waste consequently generated must be managed in accordance with all applicable local, State, and Federal regulations. (Refer to Section 15 regarding Closure Performance Standards.)

Special Requirements for Ignitable or Reactive Waste

(a) Generators who manage ignitable or reactive waste in a covered tank must comply with the buffer zone requirements for tanks in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code" (1977 or 1981).

(b) Ignitable or reactive waste must not be placed in a tank unless the following conditions are met:

- The waste is treated, rendered, or mixed before or immediately after placement in a tank so that:
  - o the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste and
  - o 40 CFR 265.17(b) is complied with.
- The waste is managed in such a way to protect it from any material or conditions that may cause the waste to ignite or react.

Special Requirements for Incompatible Wastes

(a) Incompatible wastes or incompatible wastes and materials must not be placed in the same tank. (Attachment 6 provides Examples of Potentially Incompatible Waste (40 CFR Part 265 Appendix V).)

(b) Hazardous waste must not be placed in an unwashed tank which previously held an incompatible waste or material.

Discussion

SQGs must comply with the Federal SQG tank requirements. However, Connecticut is more stringent in that SQGs are not allowed to manage hazardous wastes in uncovered tanks nor are SQGs allowed to place ignitable or reactive waste in a tank used solely for emergencies. Connecticut also has more stringent marking requirements.

14. Use of Permitted Transporters

RCSA 22a-449(c)-102(b)(1) and -102(c)(2)

A generator shall not offer his hazardous waste to a transporter who does not have an EPA Identification Number and who does not have a current transporter permit pursuant to section 22a-449(c)-11 of the Regulations of Connecticut State Agencies.

Discussion
This is a Connecticut requirement which is the same for LQGs and SQGs.

A transporter will be handling your waste once it leaves your facility and is beyond your control, yet you are still responsible for the proper management of your waste. Therefore, careful selection of a hazardous waste transporter is very important.

Before selecting a transporter, you may wish to check with the following sources:

Trade Associations. A trade association that you are affiliated with may be familiar with transporters which typically handle waste generated by your industry.

Better Business Bureau and Chamber of Commerce. Such agencies may have records of any complaints registered against the transporter.

CT DEP Bureau of Waste Management Waste Engineering and Enforcement Division (203/424-3372). Our Division processes all transporter applications and issues permits to transporters to transport waste through the State of Connecticut. You should contact us to determine if a particular transporter has a current and valid permit, if the transporter is permitted to handle the type of waste you generate, and if the transporter is under any enforcement action by DEP. Our Division also has lists of transporters by waste category; lists are available upon request. (However, these lists are not intended to recommend any particular company identified on the list. You are urged to contact us to verify that the information on the list is current.)

You may also wish to check the transporter's reputation with its clients and any other companies dealing with the transporter.

After checking the sources suggested above, contact the transporter directly to verify they have an EPA ID Number and necessary insurance and to verify whether the transporter can or will handle your waste.

When the transporter arrives at your site, ask to see a copy of their transporter permit (they are required to keep a copy of their permit in their vehicle). Review the permit to verify that the waste types you are offering for transport are in fact identified.

Try to begin your selection process well in advance. Careful selection is very important.

15. Closure Performance Standard

Disposal or Decontamination of Equipment, Structures, and Soils

RCSA 22a-449(c)-102(a)(1) and -102(c)(2)
40 CFR 262.34(a)(1)
40 CFR 265.111 and 265.114

The generator must close the facility in a manner that minimizes the need for further maintenance and controls, minimizes, or eliminates escape of hazardous waste and hazardous constituents.

During partial and final closure periods, all contaminated equipment, structures, and soil must be properly disposed of or decontaminated.

Discussion

Connecticut requires SQGs to comply with closure standards applicable to LQGs.

This requirement applies to areas at a generator's site where hazardous wastes are managed and handled (e.g. a tank, its associated piping and underlying containment system; a container storage area, including the containers, and the land or pad upon which they are placed).

If you are discontinuing the use of equipment or structures used for the management of hazardous waste or closing your facility, please contact the DEP Waste Engineering and Enforcement Division for guidance on the proper disposal or decontamination of any contaminated equipment, structures or soils.

C. Episodic Generators of Hazardous Waste

An "episodic generator" is a generator who does not generate hazardous waste at a uniform rate. Such "episodic generators" may generate, for example, less than 100 kg of hazardous waste during one month, quantities of 100-1000 kg during other months, or may periodically exceed 1000 kg in a month.

A generator may be subjected to different standards at different times, depending upon his generation rate in a given calendar month. Thus, a generator of less than 100 kg in one calendar month would be deemed a conditionally-exempt SQG ("CESQG") in that month, subject only to regulatory requirements applicable to CESQGs for that month. However, if in the next calendar month, the generator generates more than 100 kg but less than 1000 kg of hazardous waste, he is subject to all regulatory requirements applicable to SQGs. Likewise, if a generator generates greater than 1000 kg in any calendar month, he is deemed an LQG, subject to all applicable regulatory requirements for LQGs.

When applying for an EPA Identification Number, a generator should notify of hazardous waste activity for their "worst case" generator category. For example, if a generator will operate as an SQG during some months and as an LQG during other months, the generator should notify as an LQG. (Likewise, when completing Biennial Reports, generators should specify the worst-case generator status that they operated as during the applicable reporting period.)

DEP strongly advises episodic generators to document their waste generation and accumulation rates each month to support any claims of episodic generation. DEP will place burden of proof on the generator to demonstrate he was not subject to certain requirements at certain times.

If a generator determines that his generator status has changed permanently, he should request a status change. Such requests should be made in writing to:

Attn: Inga Rubecka
State of Connecticut Department of Environmental Protection
Bureau of Waste Management
Engineering and Enforcement Division
79 Elm Street
Hartford, CT 06106-5127

Upon receipt of this request, the Waste Management Bureau will forward appropriate forms to the generator which must then be completed and returned to DEP. (A "Request for Change" form is included in Attachment 7 for your convenience.)

The status change information above does <u>not</u> apply to TSDFs. If a facility operated as a treatment, storage or disposal facility at any time since the effective date of RCRA, such facilities must close in accordance with 40 CFR 264 or 265 before their status may be changed and before such facilities may be released from complying with TSDF requirements. The only exception may be in the case of a "protective filer"-- who notified "just in case" but never treated, stored or disposed of hazardous waste after 11/19/80 (the effective date of the first RCRA regulations) and who filed the necessary certification forms.

For more information regarding episodic generators, refer to "Determination of Generator Status" (Federal Register /Volume 51, No. 56 /Monday, March 24, 1986 /Page 10153.)

D. Waste Minimization and Pollution Prevention

RCRA Section 3001(d)
RCRA Section 3002(b)

A small quantity generator is required to make a good faith effort to minimize his waste generation and select the best waste management method that is available to him that he can afford.

Discussion

In the Resource Conservation and Recovery Act, Congress declared a national policy: the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible. By reducing the amount of hazardous waste generated, the need for treatment, storage, or disposal of hazardous waste will subsequently be minimized. This concept is **WASTE MINIMIZATION.**

Waste Minimization methods include:

Source reduction or POLLUTION PREVENTION. Prevent waste generation through improved maintenance practices, by modifying equipment, or changing production/manufacturing processes. Manufacturing process changes may include either eliminating a process that produces a hazardous waste or altering the process so that it no longer produces the waste.

Source separation (or segregation). Keep hazardous waste from contaminating nonhazardous waste through management practices that prevent the wastes from coming into contact with each other. This is the cheapest and easiest method of reducing the volume of hazardous waste to be disposed of, and is widely used by industry. In addition to reducing disposal costs, source separation reduces handling and transportation costs.

Reusing, recycling or recovering wastes. Recycling is the process of removing a substance from a waste and returning it to productive use. Generators commonly recycle solvents, acids, and metals.

Substitution of raw materials. Replace a raw material that generates a large amount of hazardous waste with one that generates little or no hazardous waste, which can substantially reduce the volume of hazardous waste generated. Substitution may offer the greatest opportunity for waste reduction.

Good housekeeping practices. Avoid spills. Properly manage waste in tanks and containers, etc.

POLLUTION PREVENTION activities are those that cause a net reduction in the use of materials or that cause a net reduction in the generation of waste. Pollution prevention begins at the source and results in reduced quantities of materials used, reduced toxicity of materials and waste products, and reduced quantities of waste. Congress passed the Pollution Prevention Act of 1990 and reinforced the Environmental Management Hierarchy below as national policy. Public Act 91-376 established pollution prevention as the public policy of Connecticut.

With regard to selecting the best waste management method that is available to and affordable for SQGs, "best" is defined as Number 1 below, with Number 4 being the least desirable waste management option.

1. Pollution should be prevented or reduced at the source wherever feasible (i.e., the top priority is **source reduction**);

2. Pollution that cannot be prevented should be recycled in an environmentally safe manner wherever feasible (on-site recycling activities are preferable);

3. Pollution that cannot be prevented or recycled should be treated in an environmentally safe manner wherever feasible; and

4. Disposal or other release into the environment should be employed only as a last resort and should be conducted in a manner that minimizes the impact to the environment to the greatest extent possible.

There are many benefits associated with pollution prevention. For example, you are an SQG--generating between 100 and 1000 kilograms per month of hazardous waste. You reduce the amount of hazardous waste you generate to below 100 kilograms per month. As a result of this reduction in your waste stream, you may achieve the following:

- Change in RCRA generator status from SQG to conditionally-exempt small quantity generator ("CESQG"); which in turn reduces regulatory requirements (the hazardous waste regulatory requirements for CESQGs are less stringent than those for SQGs);

- Cost savings (through more efficient use of resources and materials and reduced waste treatment and disposal costs);

- Improved competitive advantage;

- Potential reduction in hazardous-waste-related liabilities at both on-site and off-site treatment, storage and disposal facilities and for worker safety (the less hazardous waste you generate, the lower your potential for negative environmental impacts);

- Enhanced public image in the community and among your employees; and

- Being part of the POLLUTION SOLUTION!

For more information. The booklets, "Waste Minimization Environmental Quality and Economic Benefits" and "Recommended Methods for Handling Hazardous Waste" provide detailed information on waste minimization procedures. Both are available from the Bureau of Waste Management free of charge. EPA has also developed a "Facility Pollution Prevention Guide"; excerpts from this guide and industry specific pollution prevention checklists are available through the Waste Management Bureau. Additional pollution prevention reference materials, such as DEP's Statement on Pollution Prevention and a DEP Pollution Prevention Reference Sheet, are listed in Attachment 8.

For additional information concerning waste minimization and pollution prevention, you may wish to contact the following:

Program Coordination Unit, Planning and Standards Division, Waste Management Bureau, CT DEP (203)424-3022: The DEP has identified three types of businesses to provide technical assistance for pollution prevention--lawn and ornamental plant pesticide applicators, furniture stripping and repair, and automotive repair and refinishing. Contact this unit for further information about this program.

Hazardous Waste Management Service--Connecticut Technical Assistance Program ("ConnTAP") (203)244-2007: The Hazardous Waste Management Service is a quasi-public agency. ConnTAP offers free, non-regulatory technical and financial assistance to industry and the public. ConnTAP focuses on waste minimization and pollution prevention, and offers on-site pollution prevention assessments, and operates a library of technical pollution prevention information.

Northeast Multi-Media Pollution Prevention Program (NEMPP) (617)367-8558: NEMPP has a clearinghouse of over 700 technical publications on pollution prevention (including technical reports, fact sheets, audit forms, case studies, etc.) , many of which can be ordered for the cost of printing and mailing.

Small Business Development Office, Department of Economic Development (203)258-4220. This office assists Connecticut companies by providing them with technical assistance and other business services.

Note: For questions regarding **hazardous waste management regulations**, you should contact:

- State of Connecticut DEP (using the telephone numbers provided in the Preface of this document);
- U.S EPA Region 1, Boston, Massachusetts 617/573-9680; and/or
- U.S. EPA RCRA Hotline 800/424-9346 or 703/920-9810.

Additional Reference Sources

For more information, refer to the following:

Regulations

Regulations of Connecticut State Agencies, Sections 22a-449(c)-11 and -100 though 110 (Hazardous Waste Management Regulations).

Title 40 Code of Federal Regulation Parts 260 through 271 (Federal Resource Conservation and Recovery Act (RCRA) requirements).

Title 49 Code of Federal Regulation Parts 172, 173, 178, and 179 (Federal Transportation requirements).

Notice on SQG Rules--Federal Register /Volume 51, No. 56 /Monday, March 24, 1986.

Guidance on Compliance with Hazardous Waste Regulations

"Does Your Business Produce Hazardous Waste? Many Small Businesses Do." (US EPA / 530-SW-90-027 January 1990).

"Do You Generate Hazardous Waste? Many Small Businesses Do." (CT DEP September 1985).

"Land Disposal Restrictions Summary of Requirements" (US EPA OSWER 9934.0-1A February 1991).

"Understanding the Small Quantity Generator Hazardous Waste Rules: A Handbook for Small Business" (US EPA / 530-SW-86-019 Sept. 1986).

Self-Audit Checklist for Small Quantity Generators (CT DEP June 1988).

"Solving the Hazardous Waste Problem EPA's RCRA Program" (US EPA /530-SW-86-037 November 1986).

Pollution Prevention Publications

"Costs to Consider in a Financial Analysis of a Pollution Prevention Project" (CT DEP February 1992).

EPA Guidance to Hazardous Generators on the Elements of a Waste Minimization Program--Federal Register, June 12, 1989.

EPA Pollution Prevention Policy--Federal Register, January 26, 1989.

"Facility Pollution Prevention Guide" (US EPA/600/R-92/088 May 1992).

"Less is More: Pollution Prevention is Good Business", EPA Video (call RCRA Hotline 800/424-9346).

"Waste Minimization Environmental Quality and Economic Benefits" (US EPA /530-SW-90-044 Second Edition April 1990).

Waste Minimization in Metal Parts Cleaning" (EPA/530-SW-89-049 August 1989).

Waste Minimization Opportunity Assessment Manual (EPA/625/7-90/008 August 1990).

The following **industry-specific "Guides to Pollution Prevention"** are also available. To order these EPA publications, write to: ATTN: ORD Research Information Unit, U.S. EPA, Office of Research and Development, Center for Environmental Research Information, Cincinnati, OH 45268.

Auto Repair Industry (EPA/625/7-91/013).

Automotive Refinishing Industry (EPA/625/7-91/016).

Commercial Printing Industry (EPA/625/7-88/003 July 1988).

Fabricated Metal Products Industry (EPA/625/7-90/006 July 1990).

Fiberglass Reinforced and Composite Plastics Industries (EPA/625/7-91/014).

Marine Maintenance and Repair Industry (EPA/625/7-91/015).

Paint Manufacturing Industry (EPA/625/7-90/005 June 1990).

Pesticide Formulating Industry (EPA/625/7-90/004 February 1990).

Pharmaceutical Industry (EPA/625/7-91/017).

Photo-Processing Industry (EPA/625/7-91/012).

Printed Circuit Board Manufacturing Industry (EPA/625/7-90/007 June 1990).

Research and Educational Institutions (EPA/625/7-90/010 June 1990).

Pollution Prevention Publications available from other state agencies include:

Benefiting from Toxic Substance and Hazardous Waste Reduction: A Planning Guide for Oregon Businesses (Oregon DEQ, Hazardous Waste Reduction and Technical Assistance Program, 811 S.W. 6th, Portland, OR 97204, (503)229-5913.)

Minnesota Guide to Pollution Prevention Planning (Minnesota Office of Waste Management, 1350 Energy Lane 201, St. Paul, MN 55108, (612) 649-5750).

New York State Waste Reduction Guidance Manual (New York State DEC, Bureau of Pollution Prevention, Division of Hazardous Substances Regulation, 50 Wolf Road, Albany, NY 12233-7253, (518)457-6072).

Profiting from Waste Reduction in Your Small Business (Alaska Health Project, 1818 W. Northern Lights Blvd, Suite 103, Anchorage, AK, 99517, (800)-478-2864. Cost $6.00.)

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Attachment 1

District Map of Connecticut

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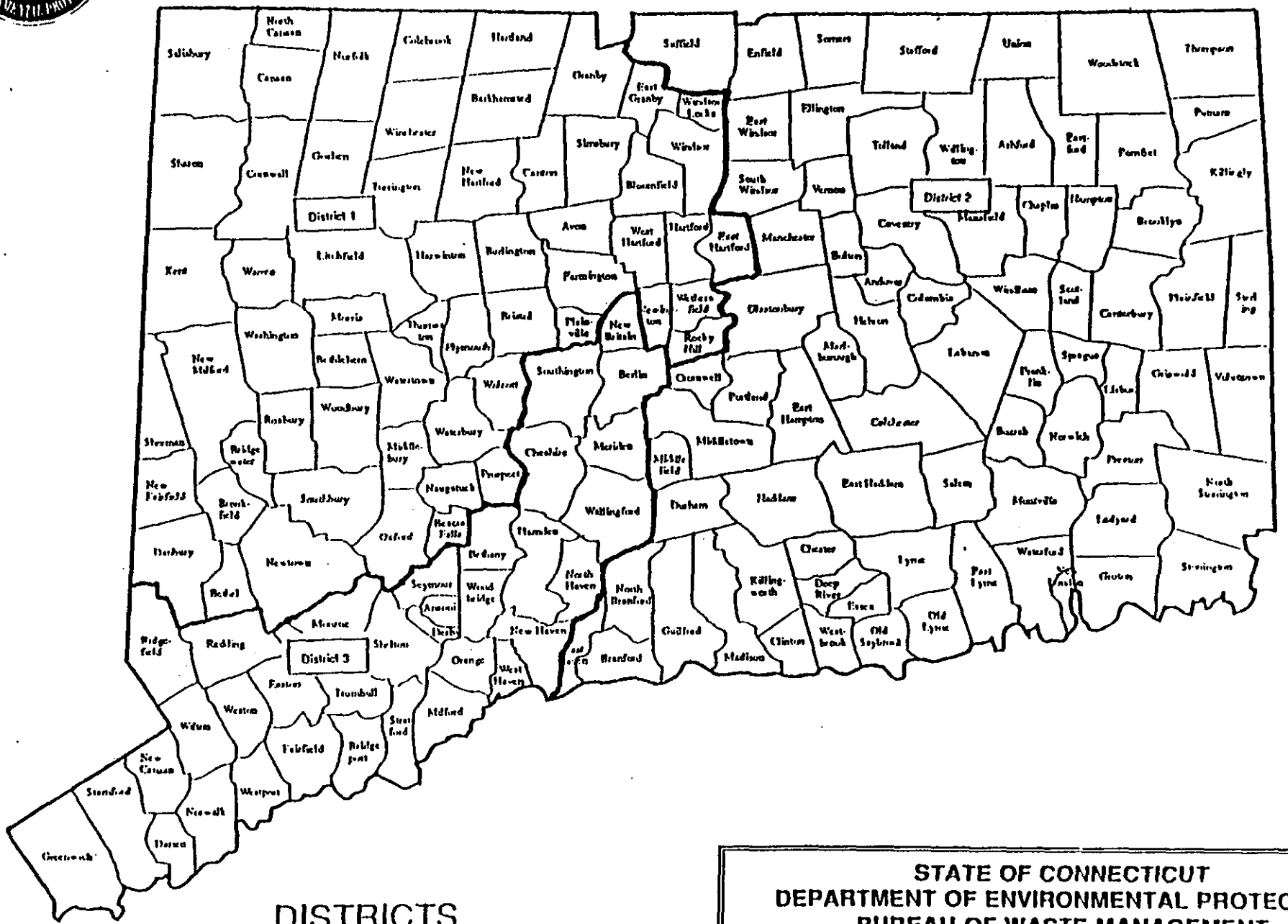
WASTE ENGINEERING AND ENFORCEMENT DIVISION
HAZARDOUS WASTE PROGRAM



DISTRICTS

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

2/93

Waste Engineering and Enforcement Hazardous Waste District 1

AVON
BARKHAMSTED
BEACON FALLS
BETHEL
BETHLEHEM
BLOOMFIELD
BRIDGEWATER
BRISTOL
BROOKFIELD
BURLINGTON
CANAAN
CANTON
COLEBROOK
CORNWALL
DANBURY
EAST GRANBY
EAST HARTFORD
FARMINGTON
GOSHEN
GRANBY
HARTFORD
HARTLAND
HARWINTON
KENT
LITCHFIELD
MIDDLEBURY
MORRIS
NAUGATUCK
NEW FAIRFIELD
NEW HARTFORD
NEWINGTON
NEW MILFORD
NEWTOWN
NORFOLK
NORTH CANAAN
OXFORD
PLAINVILLE
PLYMOUTH
PROSPECT
ROCKY HILL
ROXBURY
SALISBURY
SHARON
SHERMAN
SIMSBURY
SOUTHBURY
THOMASTON
TORRINGTON
WARREN
WASHINGTON
WATERBURY
WATERTOWN
WEST HARTFORD
WETHERSFIELD
WINCHESTER
WINDSOR
WINDSOR LOCKS
WOLCOTT
WOODBURY

Waste Engineering and Enforcement Hazardous Waste District 2

ANDOVER
ASHFORD
BOLTON
BOZRAH
BRANFORD
BROOKLYN
CANTERBURY
CHAPLIN
CHESTER
CLINTON
COLCHESTER
COLUMBIA
COVENTRY
CROMWELL
DEEP RIVER
DURHAM
EASTFORD
EAST HADDAM
EAST HAMPTON
EAST HAVEN
EAST LYME
EAST WINDSOR
ELLINGTON
ENFIELD
ESSEX
FRANKLIN
GLASTONBURY
GRISWOLD
GROTON
GUILFORD
HADDAM
HAMPTON
HEBRON
KILLINGLY
KILLINGWORTH
LEBANON
LEDYARD
LISBON
LYME
MADISON
MANCHESTER
MANSFIELD
MARLBOROUGH
MIDDLEFIELD
MIDDLETOWN
MONTVILLE
NEW LONDON
NORTH BRANFORD
NORTH STONINGTON
NORWICH
OLD LYME
OLD SAYBROOK
PLAINFIELD
POMFRET
PORTLAND
PRESTON
PUTNAM
SALEM
SCOTLAND
SOMERS
SOUTH WINDSOR
SPRAGUE
STAFFORD
STERLING
STONINGTON
SUFFIELD
THOMPSON
TOLLAND
UNION
VERNON
VOLUNTOWN
WATERFORD
WESTBROOK
WILLINGTON
WINDHAM
WOODSTOCK

Waste Engineering and Enforcement Hazardous Waste District 3

ANSONIA
BERLIN
BETHANY
BRIDGEPORT
CHESHIRE
DARIEN
DERBY
EASTON
FAIRFIELD
GREENWICH
HAMDEN
MERIDEN
MILFORD
MONROE
NEW BRITAIN
NEW CANAAN
NEW HAVEN
NORTH HAVEN
NORWALK
ORANGE
REDDING
RIDGEFIELD
SEYMOUR
SHELTON
SOUTHINGTON
STAMFORD
STRATFORD
TRUMBULL
WALLINGFORD
WEST HAVEN
WESTON
WESTPORT
WILTON
WOODBRIDGE

Attachment 2

Guidance:
Selection of a Treatment, Storage, or Disposal Facility

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Guidance:
Selection of a Treatment, Storage, or Disposal Facility

A hazardous waste treatment, storage, or disposal facility ("TSDF") will be the final destination of your waste stream. While your waste will be beyond your control once it leaves your site, you are still responsible for its proper management. Therefore, careful selection and designation of a TSDF is extremely important.

As a generator, you must not offer hazardous waste to a treatment, storage, or disposal facility that has not received an EPA Identification Number or that does not have a RCRA facility permit.

Before selecting or designating a TSDF, you may wish to check with the following sources:

Trade Associations. A trade association that you are affiliated with may be familiar with TSDFs which typically handle waste generated by your industry.

Better Business Bureau and Chamber of Commerce. Such agencies may have records of any complaints registered against the TSDF.

CT DEP Bureau of Waste Management Waste Engineering and Enforcement Division--Permitting and Enforcement Sections (Refer to the Preface for telephone numbers). If the facility you are considering is located in the State of Connecticut, the Division reviews all facility permit applications and issues permits to facilities to treat or store hazardous wastes in Connecticut and the Division conducts annual inspections of these facilities to evaluate their compliance with the regulations. You should contact us to determine if a particular TSDF has a current and valid permit, if the TSDF is permitted to handle the type of waste you generate, and if the TSDF is under any enforcement action by DEP. A 'List of Commercial Waste Facilities in Connecticut' is maintained by the Bureau; the list is available upon request. (However, this list is not intended to recommend any particular company identified on the list. You are urged to contact us to verify that the information on the list is current.)

After checking the sources suggested above, contact the TSDF directly to verify they have an EPA ID Number, permit, and necessary insurance and to verify whether the TSDF can or will handle your waste. It may also be advisable to check the TSDF's reputation with its clients and any other companies dealing with the facility.

If you believe the facility is doing something irregular, discuss the issue with them and notify the DEP Waste Engineering and Enforcement Division immediately.

Again, try to begin your selection process well in advance.

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Attachment 3

Example: Properly Completed Manifest

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STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Hazardous Waste MANIFEST PROGRAM, State Office Building
Hartford, CT 06106

(Please print or type. Form designed for use on elite (12-pitch) typewriter.)

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but may be required by State law.
C T D 1 2 3 4 5 6 7 8 9	0 0 0 0 1	1	

3. Generator's Name and Mailing Address
Small Generation Company, Inc.
P.O. Box 100
Smalltown, CT 06000-0100

4. Generator's Phone (203) 555-5555

A. State Manifest Document Number: CT F 0082973

B. G.S.I. (Gen. Site Address): 100 North Main Street, Smalltown, CT 06000

5. Transporter 1 Company Name: Safe Transportation Company — 6. US EPA ID Number: C T D 9 8 7 6 5 4 3 2 1

C. S.T.I. (Trans. Lic. Plate #) CT- SAFE1

D. Tran. Phone (203) 555-9876

7. Transporter 2 Company Name — 8. US EPA ID Number

E. S.T.I. (Trans. Lic. Plate #)

F. Tran. Phone ( )

9. Designated Facility Name and Site Address
Destination Facility, Inc.
One Treat-Rite Way
Friendlyville, CT 06555

10. US EPA ID Number: C T D 4 3 2 1 6 7 8 9 5

G. State Facility's ID (Not Required)

H. Facility's Phone (203) 555-4321

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Hazardous Waste, Liquid, n.o.s. (1,1,1-Trichloroethane) ORM-E NA9189	0 0 1	D M	0 0 0 5 5	GAL	EPA F001 / STATE
b. RQ, Hazardous Waste, Solid, n.o.s. (EPA, D008) ORM-E NA9189	0 0 1	D M	0 0 0 5 5	GAL	EPA D008 / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above (Interim / Final)	
a. 1,1,1-Trichloroethane	c.	a.	c.
b. Tumbling Sludge Containing Lead	d.	b.	d.

15. Special Handling Instructions and Additional Information

Emergency Telephone No. (203) 555-5555

Point of Departure:

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
Marty T. Manager (On behalf of the US Army Corps of Engineers)	Marty T. Manager	0 1	2 5	9

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR / TRANSPORTER / FACILITY

IN THE EVENT OF A SPILL CONTACT THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD 1-800-424-8802. FOR SPILLS WITHIN CONNECTICUT CONTACT DEP

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Attachment 4

Sample Inspection Log Format

List of Equipment, Structures, Areas to be Considered for Inclusion in an Inspection Schedule

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SQGs Sample Inspection Log for Hazardous Waste Containers

Instructions: Please use ink. Results of weekly inspections of hazardous waste containers and container storage area must be recorded in this log. If any deficiencies are found during the inspection, a description of the deficiency must be recorded in the Observations column. Prompt and immediate action must be taken to correct any deficiencies observed. The date and nature of all corrective actions must be recorded in the Corrective Action column. Once this log is completed, it should be maintained in a binder and must be kept for at least 3 years from the date of the inspection. These inspection logs must be made available for inspection by State DEP inspectors.

Date of Inspection: _____ Time of Inspection: _____a.m./p.m. Name of Inspector: _____

Item/Condition to be checked	*Yes*	*No*	*Observation/ Deficiency*	*Corrective Action and Date*
Are all containers closed?				
Are all containers in GOOD condition (NOT leaking, rusted, bulging or otherwise in poor condition?				
Are all containers marked?				
Does the marker include the words "Hazardous Waste" and the Chemical Name?				
Are all markers legible and visible for inspection?				
Are all containers marked with accumulation dates?				
Are dates less than 180 days?				
Is the amount of wastes on-site less than 1000 kgs (2200 lbs)?				
Is there adequate aisle space?				
Are containers stored on an impermeable base that is bermed?				
Are the base and berm free of gaps, cracks and damage?				
Is the base free of spills, leaks or other accumulation?				
Are incompatible materials separated by a wall or berm?				

Note: If the "NO" column is checked, corrective action must be taken and the "Observation" and "Corrective Action" columns must be completed.

Additional Comments:

List of Equipment, Structures, Areas to be Considered for Inclusion in an Inspection Schedule

This list is not all inclusive and should be used only as guidance. Your inspection schedule should be developed specific to your facility and operational requirements. Regulations require that all monitoring equipment, safety and emergency equipment, security devices, operating and structural equipment, loading and unloading areas, containers and tanks (including ancillary equipment), storage areas, and containment systems be inspected.

Safety Equipment
Emergency Shower
Face Shields
Protective Glasses
Disposable Respirators
First Aid Equip./Supplies
Protective Clothing
Air Purifying/
Chemical Respirators
Signs

Emergency Equipment
Fire Blankets
Fire Extinguishers
Fire Alarm Systems
Generators
Emergency Lights
Portable Pumps/Hoses
Fire Fighting Wagon/Hoses
Self-Contained Breathing App.
Absorbents
Containment Booms
Spill Response Carts/Wagons

Structures
Dikes/Berms
Troughs/Sumps
Ramps
Elevators/Lifts
Tank Supports
Containment Vault
Bases/Foundation
Roofs
Walls

Security Equipment
Fences
Warning Signs
Gates
Lighting
Locks

Monitoring Equipment
Liquid Level Alarms/Meters
Conservation Vents
Leak Detection System
Fire Detection System
Ground Water Monitoring Sys.

Areas
Loading Area
Unloading Area
Storage Area
Main Roadway
Gate Areas
Periphery

Tanks
Waste Feed Cut-Off/Bypass
Discharge Control Equip.
Drainage System
Monitoring Equip. Data
-temperature
-pressure
Waste Level
Tank Material/Seams
-corrosion
-leaking
Plumbing/Sump
Labeled/Marked
-with words Hazardous Waste
-with chemical name

Containers
Condition
-leaking
-bulging
-rusted/corroded
Closed when not in use
Marked
-with words Hazardous Waste
-with chemical name
Accumulation Date
On site < or > 180 days
Adequate Aisle Space

Mobile Equip.
Tires/Tracks
Brakes
Hydraulics
Trailer Hitches
Lights
Horns/Sirens
Engine Condition

Communication Equipment
Telephones
Pagers
Radios (e.g., 2-way)
Intercoms
Public Address System
TV Monitoring System

Attachment 5

Examples: Hazardous Waste Container Markers

(Listed and Characteristic Hazardous Wastes)

DOT Guide: Hazardous Materials Warning Placards and Labels

NOTE: At the time of printing of this document, DOT regulations were under revision; revised regulations will be effective in October 1993. As a result, up-to-date DOT guides were not yet available at the time of printing. It was, therefore, not possible to include the guides in this attachment as intended. Please contact DOT to obtain a copy of these guides, when available, and insert them in this attachment.

To obtain Hazardous Materials Marking, Labeling and Placarding Guides, contact the Publications Office of DOT at 202/366-4900.

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ORM-E

HAZARDOUS WASTE

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL

IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY

PROPER D.O.T. SHIPPING NAME: Rq. Hazardous Waste Solid, n.o.s. (EPA, D008), ORM-E (Tumbling Sludge containing Lead) UN OR NA #: NA 9189

GENERATOR INFORMATION

NAME: Small Generation Company, Inc.

ADDRESS: 100 North Main Street

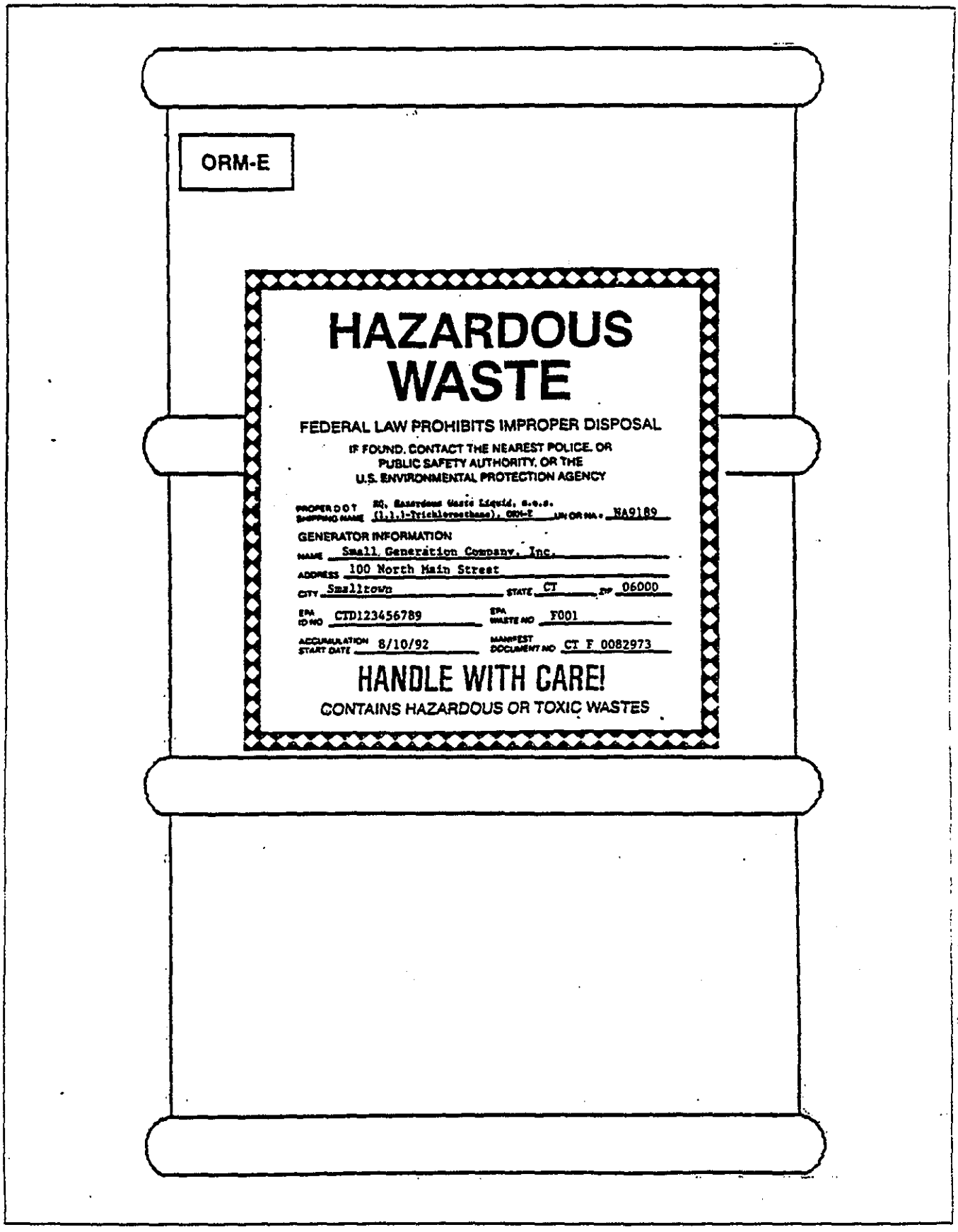
CITY: Smalltown STATE: CT ZIP: 06000

EPA ID NO: CTD123456789 EPA WASTE NO: D008

ACCUMULATION START DATE: 8/14/92 MANIFEST DOCUMENT NO: CT F 0082973

HANDLE WITH CARE!

CONTAINS HAZARDOUS OR TOXIC WASTES


ORM-E
HAZARDOUS WASTE
FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST POLICE, OR PUBLIC SAFETY AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY
PROPER D.O.T. SHIPPING NAME RQ, Hazardous Waste Liquid, n.o.s. (1,1,1-Trichloroethane), ORM-E UN OR NA # NA9189
GENERATOR INFORMATION
NAME Small Generation Company, Inc.
ADDRESS 100 North Main Street
CITY Smalltown STATE CT ZIP 06000
EPA ID NO CTD123456789 EPA WASTE NO F001
ACCUMULATION START DATE 8/10/92 MANIFEST DOCUMENT NO CT F 0082973
HANDLE WITH CARE!
CONTAINS HAZARDOUS OR TOXIC WASTES

Attachment 6

Examples of Potentially Incompatible Waste

(excerpt 40 CFR Part 265 Appendix V)

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APPENDIX V TO PART 265—EXAMPLES OF POTENTIALLY INCOMPATIBLE WASTE

Many hazardous wastes, when mixed with other waste or materials at a hazardous waste facility, can produce effects which are harmful to human health and the environment, such as (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dusts, mists, fumes, or gases, or (5) flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage, and disposal facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his wastes so that he can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g., adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator).

In the lists below, the mixing of a Group A material with a Group B material may have the potential consequence as noted.

Group 1-A	Group 1-B
Acetylene sludge	Acid sludge
Alkaline caustic liquids	Acid and water
Alkaline cleaner	Battery acid
Alkaline corrosive liquids	Chemical cleaners
Alkaline corrosive battery fluid	Electrolyte, acid
Caustic wastewater	Etching acid liquid or solvent
Lime sludge and other corrosive alkalies	
Lime wastewater	Pickling liquor and other corrosive acids
Lime and water	Spent acid
Spent caustic	Spent mixed acid
	Spent sulfuric acid

Potential consequences: Heat generation; violent reaction.

Group 2-A	Group 2-B
Aluminum	Any waste in Group 1-A or 1-B
Beryllium	
Calcium	
Lithium	
Magnesium	
Potassium	
Sodium	
Zinc powder	
Other reactive metals and metal hydrides	

Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

Group 3-A	Group 3-B
Alcohols	Any concentrated waste in Groups 1-A or 1-B
Water	Calcium
	Lithium
	Metal hydrides
	Potassium
	SO_2Cl_2, $SOCl_2$, PCl_3, CH_3SiCl_3
	Other water-reactive waste

Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.

Group 4-A	Group 4-B
Alcohols	Concentrated Group 1-A or 1-B wastes
Aldehydes	Group 2-A wastes
Halogenated hydrocarbons	
Nitrated hydrocarbons	
Unsaturated hydrocarbons	
Other reactive organic compounds and solvents	

Potential consequences: Fire, explosion, or violent reaction.

Group 5-A	Group 5-B
Spent cyanide and sulfide solutions	Group 1-B wastes

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

Group 6-A	Group 6-B
Chlorates	Acetic acid and other organic acids
Chlorine	Concentrated mineral acids
Chlorites	Group 2-A wastes
Chromic acid	Group 4-A wastes
Hypochlorites	Other flammable and combustible wastes
Nitrates	
Nitric acid, fuming	
Perchlorates	
Permanganates	
Peroxides	
Other strong oxidizers	

Potential consequences: Fire, explosion, or violent reaction.

Source: "Law, Regulations, and Guidelines for Handling of Hazardous Waste." California Department of Health, February 1975.

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Attachment 7

Request for Change Form (Status Change)

This form may be used to request changes in RCRA generator status. This form may also be used to notify the Department of a:

1) change of company name,
2) change of location or mailing address,
3) change of company contact,
4) change of phone number, and/or
5) change of company ownership.

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STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF WASTE MANAGEMENT

REQUEST FOR CHANGE(S)
OF RCRA NOTIFIER DATA BASE

Please use this form to advise the Bureau of Waste Management of any changes to the information originally submitted on your "Notification of Hazardous Waste Activity," so that the Department of Environmental Protection and the U.S. EPA records can be updated.

Please be sure to sign the certification. Then turn the form over and complete the sections for which changes are being requested. Attach any additional information and submit it as a package to the following address:

Inga Rubecka
Bureau of Waste Management
State of Connecticut DEP
79 Elm Street
Hartford, CT 06106-5127

If you have any questions regarding this form, please contact Inga Rubecka at (203) 424-3566.

OWNER/OPERATOR CERTIFICATION: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

_____ _____
Name (please type) Signature

_____
Title

( ) _____ _____
Telephone Number Date Signed

Note changes on reverse-->

79 Elm Street • Hartford, CT 06106

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Attachment 8

DEP Statement on Pollution Prevention

DEP Pollution Prevention Reference Sheet

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State of Connecticut
Department of Environmental Protection

STATEMENT ON POLLUTION PREVENTION

The Department of Environmental Protection is the steward of our natural heritage. Its mission is to protect and enhance the public health and the environment in the face of a variety of competing demands of human behavior. The complexity of this task is one of the greatest challenges of our generation. The purpose of this statement is to bring the philosophy of pollution prevention into the forefront of our efforts to deal with these problems in the coming years.

Pollution prevention is a different way of thinking about the solution to environmental problems. The traditional way of thinking is to accept some pollution as inevitable and to control it by a variety of "end-of-pipe" regulatory directives. There remains an important role for this approach. Pollution is a by-product of much of our society and the traditional mechanisms of regulation and control are necessary if the environment is to be protected and preserved. Nonetheless, there is an increasing awareness that our agency's role may be more effective and that society in general will be better served if we can eliminate pollution at the source. Pollution prevention is not really new. We have used it informally in agency programs for over twenty years.

Pollution Prevention has been established as the public policy of the State of Connecticut by Public Act 91-376. It has been established as the public policy of the United States by the Pollution Prevention Act of 1990. It will accordingly be a priority of this agency to expand and accentuate the use of pollution prevention in all our agency programs.

To this end, we have already begun on a program consisting of the following steps:

- Institutionalization of multi-media pollution prevention in our regulatory programs.
- Eliminating barriers to pollution prevention initiatives.
- Identifying the targets of an outreach program.

Virtually all members of the agency may expect to be involved in this program in one way or another.

A program is only as good as the individual initiatives which support it. It is therefore important that this program be regarded as a guide to creativity rather than a bureaucratic requirement. As we look to the future, there will be many opportunities to apply novel and innovative approaches to our task. Among the potential benefits are a more efficient regulatory climate, the stimulation and encouragement of a different ethic in the regulated community, a greater awareness of the costs of pollution and an integration of these costs into our market economy, the possible stimulation of a new generation of "green" economic activity and, most importantly, an improvement of the quality of life for all our citizens. For all these reasons, pollution prevention is hereby declared to be a priority of the agency and with your assistance, we intend to make the promise of this program become a reality.

September 18, 1992

Timothy R.E. Keeney
Commissioner

POLLUTION PREVENTION RESOURCE LIST:

SERVICES, AGENCIES AND TECHNICAL ASSISTANCE PROGRAMS

A DEP Pollution Prevention Reference Sheet

Business and industry can obtain a variety of information related to pollution prevention by contacting the many federal, state and private agencies who currently offer services and technical assistance programs. The listing below is provided as a reference and does not constitute an endorsement by the Department of Environmental Protection.

Department of Environmental Protection Business Ombudsman
Robert Kaliszewski
165 Capitol Avenue, Hartford, CT 06106
(203) 424-3003

DEP's ombudsman serves as liaison between the department and the business community and provides information on environmental programs and requirements.

ConnTAP
Connecticut Hazardous Waste Management Service
900 Asylum Avenue, Suite 360
Hartford, CT 06105
(203) 241-0777

A quasi-public agency which promotes appropriate hazardous waste management. Offers technical assistance to business, publishes a free quarterly newsletter, houses a resource center & library, and administers grant programs.

Connecticut Innovations Incorporated
845 Brook Street, Rocky Hill, CT 06067
(203) 258-4035

A non-profit organization charged with encouraging technological development in the State. Financial assistance, referrals, and business information & advice are all services available under the Product Development & Marketing Financing, Small Business Innovation Research, Technology Assistance Center and Seed Venture programs.

Connecticut Development Authority
217 Washington Street
Hartford, CT 06106
(203) 241-3730

Established to provide financial assistance to manufacturers and related businesses for a wide range of activities. CDA administers several direct and third party loan programs.

Continued on reverse side.

Connecticut Department of Economic Development
865 Brook Street, Rocky Hill, CT 06067
(203) 258-4200

The Department can help Connecticut companies by providing them with investment incentives, development assistance, financing, technical assistance and other business services. Contact the Department's Small Business Development office, 258-4220 or the Manufacturing Assistance Center, 258-4279.

U.S. Small Business Administration
330 Main Street, Hartford, CT 06106
(203) 240-4700

The Hartford District Office can provide information on SBA's Pollution Control loans, as well as other services and business loan programs.

U.S. Environmental Protection Agency
Washington, DC 20460
Region I Pollution Prevention Office, Boston MA 02203 - (617) 565-1155

EPA's **Office of Pollution Prevention** (202-245-3557) aims to integrate multimedia pollution prevention inside and outside the agency. News articles, case studies, up-coming conferences & workshops, and grant announces are published in their free monthly newsletter. The **Pollution Prevention Information Clearinghouse (PPIC)**,(703-821-4800), disseminates information on various aspects of pollution prevention (technical, legislative, financial, case studies, activities, etc.), operates a hotline and document repository. PPIC's computerized network, **PIES**, allows computer access to the databases. The **Small Business Ombudsman** (800-368-5888) also has related information. Industry, individuals, and others are eligible to receive the **Administrator's Award**, an annual program to reward innovative efforts leading to a cleaner environment.

Northeast Industrial Waste Exchange
90 Presidential Plaza, Suite 122
Syracuse, New York 13202
(315) 422-6572

A non-profit information clearinghouse for waste with reuse value. NIWE matches waste generators with waste users. A Listings Catalog is published quarterly and an On-Line Listings Catalog provides up-to-the-minute computerized information.

NERAC, Inc.
One Technology Drive
Tolland, CT 06084
(203) 872-7000

A non-profit center involved in technology transfer. NERAC's technical and scientific specialists help businesses explore environmental issues, effects, regulations and problems.

Prepared by the Connecticut Department of Environmental Protection
Waste Management Bureau, Program Coordination Unit, February 1992
For more information call (203) 424-3022.

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Attachment 9

Glossary of Acronyms and Terms

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Glossary of Acronyms and Terms

40 CFR	Code of Federal Regulations. Title 40 concerns the Protection of Environment.
49 CFR	Code of Federal Regulations. Title 49 concerns Transportation.
CESQG	Conditionally-Exempt Small Quantity Generator of hazardous waste. A CESQG generates less than 100 kilograms (or 220 pounds) of hazardous waste per month. (Refer to regulations for complete definition.)
CFR	Code of Federal Regulations. A document containing all finalized Federal regulations. Annually, regulations are compiled and placed in the Code of Federal Regulations according to a highly structured format.
Commissioner	Commissioner of the Connecticut Department of Environmental Protection, or his agent.
DEP	State of Connecticut Department of Environmental Protection.
Designated Facility	A hazardous waste treatment, storage, or disposal facility which has an EPA or State permit and which has been designated on the manifest by the generator as the facility to which the generator's waste should be delivered.
DOT	United States Department of Transportation.
EPA	United States Environmental Protection Agency.
EPA ID No.	EPA Identification Number. The unique number assigned by EPA to each generator or transporter of hazardous waste and to each treatment, storage, or disposal facility.
Generator	Any person who first creates a hazardous waste or any person who first makes the waste subject to Subtitle C regulation.
Hazardous Waste Management Regulations	Sections 22a-449(c)-100 through 110 and Section 22a-449(c)-11 of the Regulations of Connecticut State Agencies. Connecticut is authorized by EPA to conduct its own hazardous waste management program.
LQG	Large Quantity Generator of hazardous waste. An LQG generates greater than 1000 kilograms (or 2200 pounds) of hazardous waste per month. (Refer to regulations for complete definition.)
Manifest	The shipping document used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transportation from the point of generation to the point of treatment, storage, or disposal.
Permit	An authorization, license, or equivalent control document issued by EPA or State to implement regulatory requirements.
RCRA	Resource Conservation and Recovery Act is a public law enacted by Congress. Subtitle C of this Act imposes strict controls and requirements over the management of hazardous waste.
RCSA	Regulations of Connecticut State Agencies.

Regulation	The legal mechanism that spells out how a statute's broad policy directives are to be carried out.
SQG	Small Quantity Generator of hazardous waste. An SQG generates between 100 and 1000 kilograms (or 220 and 2200 pounds) of hazardous waste per month. (Refer to regulations for complete definition.)
Transporter	Any person engaged in the off-site transportation of hazardous waste within the United States, by air, rail, highway, or water.
TSDF	A hazardous waste treatment, storage or disposal facility. TSDFs are subject to the permitting requirements of RCSA Sections 22a-449(c)-104, 105, and 110 and of 40 CFR Parts 264, 265, and 270.

APPENDIX D

HAZARDOUS WASTE MANIFEST DESIGNATIONS AND SIGNATURE POLICIES

The project manager should insert the training records and the formal written designation and authorization from the District Commander for those individuals authorized to sign hazardous waste manifests at the project.

US Army Corps of Engineers

Construction Bulletin

No.	Issuing Office:	Issue Date:	Exp. Date:
93-6	CEMP-CP	5/4/93	31 DEC 95

CEMP-C

Subject: Hazardous Waste Manifest Signature Policy and Procedures

Applicability: DIRECTIVE

1. REFERENCES.

a. Construction Bulletin No. 91-13, 3 Jul 91, subject: Preparation and Signature of Hazardous Waste Manifests and Land Ban Certifications on EPA Superfund Projects.

b. Construction Bulletin No. 91-21, 27 Nov 91, subject: Signature of Hazardous Waste Manifests for EPA Superfund Projects.

c. Construction Bulletin No. 92-1, 29 Jan 92, subject: Asbestos Notification and Waste Shipment Record Requirements.

d. ER 1180-1-6, Construction Quality Management, 1 Apr 91.

e. ER 1110-1-263, Chemical Data Quality Management for Hazardous Waste Remedial Activities, 1 Oct 90.

f. CEMP-RT memorandum dated 30 Apr 93, subject: Signatory Responsibility for Hazardous Waste Manifests and Related Documents - Policy Guidance.

2. PURPOSE.

This Construction Bulletin (CB) establishes policy regarding the signing of hazardous waste manifests and related documents. The Resource Conservation and Recovery Act (RCRA) addresses the "cradle to grave" management of hazardous waste. This includes the generation, storage, treatment, transportation and disposal of hazardous wastes. Implementing regulation (40 CFR 262) requires a generator who transports, or offers for transportation, hazardous waste for offsite treatment, storage, or disposal to prepare and sign a manifest which describes the hazardous waste in detail.

Prepared in accordance with AR 25-30 by HQUSACE Directorate of Military Programs, 20 Mass. Ave. NW, Washington D.C. 20314-1000

3. GENERAL.

With the exception of Corps owned facilities, USACE is not considered to be the owner of the hazardous waste it transports as part of the response activities. The customer agency is the generator for purposes of executing hazardous waste manifests. However, due to logistic complexities, a customer may not be able to provide an individual to sign the hazardous waste manifests in a timely manner. The customer may then request the Corps to sign project manifests on their behalf. (Federal regulations permit generators to have agents act on their behalf in signing the manifest forms). When an individual is signing on behalf of a generator which is a legal entity, such as a corporation or a company, the words "on behalf of" should be entered to indicate that the person signing the Generator's Certification is not necessarily accepting liability for violating the federal standards.

4. POLICY.

a. As the leader in DOD's full service environmental restoration efforts, USACE's role is expanding as a result of legislation, evolving missions, and customer needs. Commensurate with this role, it is USACE's goal to develop and implement practices that will facilitate the continuation of quality, comprehensive environmental services. In keeping with this goal, it is USACE's policy, if requested by its customers, to execute on behalf of those customers hazardous waste manifests and related documents. So far, two of our customers have requested USACE assistance in signing manifest forms on their behalf: the Environmental Protection Agency (EPA) and the Farmers Homes Administration. HQUSACE has accepted the delegated responsibility.

b. With regard to manifesting activities at sites where USACE is the owner or responsible agency, e.g., Civil Works facilities or Defense Environmental Restoration Program (DERP)-FUDS, manifest execution and related responsibilities will be performed by USACE.

c. With regard to DERP-Installation Restoration (IR) and Base Realignment and Closure (BRAC) environmental restoration activities, manifest execution and related responsibilities ordinarily belong to the customer (i.e., the installation or the base).

In those instances where the additional cost of sending a qualified USACE representative to a remote location for a small project is unwarranted, the option of requiring the contractor to sign the manifests is permitted and should be considered. This option can only be exercised on a project specific basis after written authorization of the customer and approval of the Chief, Construction Division at the executing district. For FUDS projects, only the approval of the Chief, Construction Division at the executing district is necessary. In all cases, this requirement (of having the contractor sign the manifest) must be incorporated in the contract solicitation prior to contract award.

5. PROCEDURES.

Where USACE personnel execute Uniform Hazardous Waste Manifest forms and related documents, procedures will be adopted by the operating divisions or districts as follows:

a. In the Generator's Name and Mailing Address box (block #3) on the Uniform Hazardous Waste Manifest form, Corps authorized personnel shall enter the following information: "Environmental Protection Agency/Superfund Program", "Farmers Homes Administration", or "DOD (DERP/FUDS)" as appropriate followed by "c/o" and then the name and address of the Corps office that manages the returned manifest forms. In the generator's certification box (block #16), the Corps employee would then sign his or her name, followed by "USACE" after writing or printing the phrase "On-behalf of the Environmental Protection Agency" or "On behalf-of the Farmers Homes Administration" as appropriate. On FUD sites, Corps personnel should follow the same procedure after typing or printing the phrase "On behalf-of the Department of Defense". All other manifest related documents executed by USACE members on behalf of a customer shall be executed by signature followed by USACE after writing or printing the phrase "on behalf of the (name of the customer)".

b. On Corps owned facilities where the Corps is a "generator" of hazardous wastes or is the "Responsible Party", Corps personnel shall enter in block #3 on the manifest form "U.S. Army Corps of Engineers", followed by the name and address of the Corps office that manages the returned manifest forms. In the generator's certification

box (block #16), the Corps authorized employee would sign his or her name after typing or printing the phrase "On behalf of the U.S. Army Corps of Engineers".

c. Corps personnel authorized to execute manifest forms and related documents shall assure compliance with all reporting requirements (e.g., exceptions reports, biennial reports and state reports) as well as follow-on requirements, including the assembly and retention of all appropriate documentation and certifications.

d. Assure that USACE is authorized by its customers to execute hazardous waste manifests and related documents on their behalf before such documents are executed. This authorization is effected through an explicit provision in a Memorandum of Agreement, Inter-Agency Agreement, or correspondence signed by an appropriate agency official* requesting and authorizing USACE to sign on their behalf. The customer request and authorization must acknowledge that the customer retains all responsibilities for the hazardous waste as a generator. This shall extend to the execution of the Hazardous Waste Manifests, Land Disposal Restriction Notification and Certifications, Waste Profile Sheets, and other forms necessary for the completion of manifests for transportation and disposal of hazardous waste. Approval to undertake the delegated responsibility of signing manifest forms and related documents rests with the chief of Construction Division at the executing district. If state statutes or regulations do not permit USACE to sign such documents on behalf of the customer, the Resident Engineer (RE) or other designated USACE representative is to contact the customer for further guidance.

e. All USACE members executing hazardous waste manifests and related documents must receive appropriate training before executing such documents. The minimum required training is specified in the following regulations:

* HQUSACE Office of Counsel advised that EPA's letter of 18 Oct 90 (see reference 1a) requesting and authorizing USACE to execute and certify manifest forms and related documents on their behalf is legally sufficient and that no further documentation or individual project authorization is necessary.

(1) Occupational Safety and Health Act (OSHA), 29 C.F.R. 1910-120;

(2) Resource Conservation and Recovery Act (RCRA), 40 C.F.R. 264.16 and 40 C.F.R. 265.16;

(3) Hazardous Transportation Uniform Safety Act (DOT), 49 C.F.R. 173.1; and May 15, 1992 Final Rule, Federal Register 49 C.F.R. 172.700 (Subpart H-Training); and

(4) Army Regulatory training requirements (AR 55-355).

Additional training may be required by operating divisions or districts. Training can be obtained from within or outside USACE. Regardless of the training source, it is the responsibility of the employing division or district to assure that the training is appropriate and that records of the members' successful completion of the training are appropriately maintained.

f. Only USACE members formally designated and authorized by a division or district commander/deputy commander shall be allowed to execute hazardous waste manifests and related documents. The formal designation and authorization must be in writing and state that the member is within his/her scope of employment when executing such documents.

g. Where USACE members are executing hazardous waste manifests and related documents, the contract under which the removal or remediation is being performed must contain supporting chemistry-related requirements and procedures. These items are imposed by the specifications and addressed by the contractor in a document known as the "Chemical Data Acquisition Plan" (see reference 1e). These plans are site specific guidance for sampling and analyses. They address, among other things, laboratory activities, chemical data documentation, equipment, sampling documentation, quality control, sample custody and shipment, analytical methods and document preparation. The project specific supplement to the QA Plan, developed by the Resident Engineer in accordance with reference 1d, must define the USACE quality assurance role in the manifesting process.

h. It is intended that future contracts shall contain a requirement that hazardous waste manifests and related documents executed by USACE members be supported by contractor submittals prepared, reviewed, and approved by an authorized representative of the contractor. The contractor's employee shall also certify that packaging, labeling, marking and placarding of the waste meet all applicable federal and state regulations, and shall also certify as correct, Land Disposal Restriction Notifications and Certifications, Waste Profile Sheets, and related documents before providing the documents to USACE.

6. To implement the above policy and procedures, HQUSACE (with MRD MCX support) is defining the responsibility of and the course of action to be followed by all parties involved, i.e., HTRW design districts, executing districts and contractors. A complete hazardous waste transportation and disposal check list will be developed for contractors to complete as part of the submittal process. For your information, the Engineer Manual on manifesting is projected to be complete by end of this fiscal year. Previously issued CB's provided you with recommended training sources, Hot Lines, and videotape libraries to assist you in accomplishing your mission.

7. This CB has been coordinated with HQUSACE 's Environmental Restoration Division (CEMP-R); Engineering Division (CEMP-E); Office of the Chief Counsel (CECC-C); Office of the Principal Assistant Responsible for Contracting (CEPR-ZA); and, Operations, Construction and Readiness Division, Directorate of Civil Works (CECW-OC).

CHARLES R. SCHROER
Chief, Construction Division

25 AUG 1993

CECW-OA

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Hazardous Waste Manifest Signature Policies and Procedures

1. References:

a. Department of Transportation Regulation 49 CFR 172.700 (Subpart H-Training).

b. Construction Bulletin 93-6, subject as above (enclosed).

2. It is Civil Works and Military Programs policy with regard to manifesting activities at sites where the U.S. Army Corps of Engineers is the owner or responsible agency, that manifest execution and related responsibilities will be performed by the Corps.

3. Department of Transportation regulation 49 CFR 172.700 (Subpart H-Training) requires training employees who load, unload, or handle hazardous materials for transportation, assure the safety of a shipment, or operate a motor vehicle used to transport hazardous materials.

4. Construction Bulletin 93-6, paragraph 5e., requires that all Corps members "executing" hazardous waste manifests and related documents must receive appropriate training before executing such documents. Completion of training is required by 1 October 1993, for employees employed on or before 2 July 1993.

5. Only Corps members formally designated and authorized by a division or district commander/deputy commander shall be allowed to execute hazardous waste manifests and related documents. The formal designation and authorization must be in writing and state that the member is within his/her scope of employment when executing such documents.

CECW-OA
SUBJECT: Hazardous Waste Manifest Signature Policies and Policies

6. Headquarters point of contact is Jim Wolcott (CECW-OA), at (202)272-1152.

/s/

JOHN P. ELMORE, P.E.
Chief, Operations, Construction,
and Readiness Division
Directorate of Civil Works

ENCL

APPENDIX E

RECYCLING INFORMATION

REGIONAL RECYCLING COORDINATORS/CONTACTS

Recycling: *Kathy Dube
CAPITOL Region Council of Govts.
221 Main Street
Hartford, CT 06106
522-2217/Fax:724-1274

Recycling: *Jeff Barnes
CENTRAL NAUGATUCK VALLEY Council of Governments
20 East Main Street
Waterbury, CT 06702
757-0535/Fax:756-7688

Recycling: *David B. Sulkis
CONNECTICUT RIVER ESTUARY Regional Planning Agency
P.O. Box 778
Old Saybrook, CT 06475
388-3497/Fax 395-1404

Recycling: *Linda Szczygiel
HOUSATONIC Resources Recov. Auth.
Old Town Hall, Route 25 & 133
Brookfield, CT 06804
775-6256/Fax:740-9167

Recycling: *Edward Donovan
LITCHFIELD HILLS COUNCIL of Elected Officials
42 North St., Town Hall
Goshen, CT 06756
491-9884/Fax:491-3729

Recycling: *Tim Wentzell
MID-NORTHEAST Regional Recycling Operating Committee
630 Governor's Highway
South Windsor, CT 06074
289-2296/Fax:289-2296

Recycling: *Winston Averill
NORTHEASTERN CT Regional RRA
P.O. Box 198
Brooklyn, CT 06234
774-1253/Fax:779-2056

Recycling: *Heather Gilbert
SOUTH CENTRAL Reg. Council of Governments
23 Peck Street
North Haven, CT 06473
234-7555/Fax:234-9850

Recycling: *Toby Goodrich
SOUTH EASTERN CT Regional RRA
132 Military Highway
Preston, CT 06365
887-6368/Fax:885-0191

Recycling: *Valerie Knight
SOUTHWEST CT Reg. Recyc. Operating Committee
Dept. of Public Works
125 East Avenue
Norwalk, CT 06856
852-0103/Fax:857-0143

Recycling: *Mark Bobman
TUNXIS Recycling Operating Committee
75 Twining Street
Bristol, CT 06010
585-0419/225-9811; Fax:585-9875

* Indicates regional coordinator

Prepared by Connecticut DEP
Recycling Program
December 1992

RECYCLING REGION LISTING BY TOWNS

CAPITOL/MID-CONNECTICUT
Andover
Canton
Cromwell
Durham
East Granby
East Hampton
East Hartford
East Windsor
Ellington
Enfield
Farmington
Glastonbury
Granby
Haddam
Hartford
Hebron
Marlborough
Middlefield
Middletown
Newington
Portland
Rocky Hill
Simsbury
South Windsor
Stafford
Suffield
Vernon
West Hartford
Wethersfield
Windsor Locks

CENTRAL NAUGATUCK
Beacon Falls
Bethlehem
Middlebury
Naugatuck
Oxford
Southbury
Thomaston
Watertown
Woodbury

ESTUARY
Chester
Clinton
Deep River
Essex
Killingworth
Old Saybrook
Westbrook

HOUSATONIC
Bethel
Bridgewater
Brookfield
Danbury
Kent
New Fairfield
New Milford
Newtown
Roxbury
Sherman

LITCHFIELD HILLS
Barkhamsted
Canaan
Colebrook
Cornwall
Goshen
Harwinton
Litchfield
New Hartford
Norfolk
North Canaan
Salisbury
Sharon
Torrington
Winchester

MID-NORTHEAST
Ashford
Bolton
Chaplin
Columbia
Coventry
Eastford
Mansfield
Tolland
Union
Willington
Windham

NORTHEAST
Brooklyn
Canterbury
Griswold
Hampton
Killingly
Plainfield
Pomfret
Putnam
Scotland
Sterling
Thompson
Woodstock

SOUTH CENTRAL
Ansonia
Derby
Hamden
New Haven
North Haven

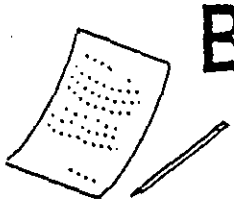
SOUTHEAST
Bozrah
Branford
Colchester
East Lyme
Franklin
Groton
Guilford
Ledyard
Lyme
Madison
Montville
New London
North Stonington
Norwich
Preston
Salem
Sprague
Stonington
Voluntown
Waterford

SOUTHWEST
Bridgeport
Darien
East Haven
Easton
Fairfield
Greenwich
Milford
Monroe
New Canaan
Norwalk
Orange
Shelton
Stamford
Stratford
Trumbull
Weston
Westport
Wilton
Woodbridge

TUNXIS
Berlin
Bristol
Burlington
Meriden
Morris
New Britain
Plainville
Plymouth
Prospect
Southington
Warren
Washington
Wolcott

INDIVIDUAL TOWN PROGRAMS
Avon
Bloomfield
East Haddam
Hartland
Lebanon
Lisbon
Manchester
Redding
Ridgefield
Somers
Wallingford
Waterbury
Windsor

UNDECIDED
Bethany
Cheshire
North Branford
Old Lyme
Seymour
West Haven



BUSINESS RECYCLING

A DEP Recycling Program Fact Sheet

AUTOMOBILE BATTERY MARKETS

The following scrap metal recyclers have indicated a willingness to accept automotive batteries. Generally, these recyclers pay for each battery; however, some recyclers merely accept batteries as a public service at no charge. Most recyclers pay a higher price for large quantities of batteries banded to pallets. Some recyclers only accept batteries if they are banded to pallets. Broken, damaged and leaking batteries are unacceptable and some dealers require batteries to be drained and dry. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

Alderman-Dow Iron & Metals
358 Chapel Street
New Haven, CT 06511
telephone: 562-1594

Calamari Brothers
20 Trumbull Street
New London, CT 06320
telephone: 442-5794

Joseph Freedman Co.
40 Albany Street
Springfield, MA 01101
telephone: 522-6395 or
(413) 781-4444

J.W. Green Co.
2676 South Washington St.
Plainville, CT 06062
telephone: 747-5514

S. Kasowitz & Sons
149 Front Ave.
West Haven, CT 06516
telephone: 932-5978

Kramer Scrap
Southern Ave.
Greenfield, MA 01301
telephone: (413) 774-3103

Lajoies
Meadow Street
South Norwalk, CT
telephone: 886-6650

MJ Metal Inc.
561 North Washington Ave.
Bridgeport, CT 06604
telephone: 334-3484

Ostrinsky, Inc.
731 Parker St.
Manchester, CT 06040
telephone: 643-5879

Rome Recycling Corp.
45 Olive Street
Hartford, CT
telephone: 951-3186

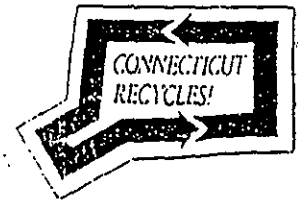
Rubino Brothers
560 Canal Street
Stamford, CT
telephone: 323-3195

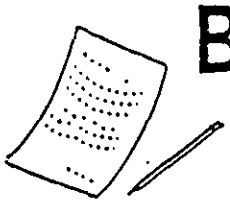
Shetucket Iron &
Scrap Metal
Norwich, CT 06360
telephone: 887-1681

Suisman & Blumenthal
500 Flatbush Ave.
Hartford, CT 06106
telephone: 522-3123

M. Wilder & Sons
569 North Colony St.
Meriden, CT 06450
telephone: 235-4225

Prepared by Connecticut
DEP Recycling Program
December 1989





BUSINESS RECYCLING

A DEP Recycling Program Fact Sheet

WOOD PALLET MARKETS

The following businesses have indicated that they accept wooden pallets or are listed under pallets in the yellow pages. Some businesses accept any grade and size because they make chips for fuel, while others reuse the pallets. To be reusable, the pallets must be heavy duty returnable construction and a commonly used size. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

Associated Refuse
Newtown, CT
Contact: Pat Caruso
telephone: 426-8870
* chips for fuel

Condordia Manufacturing Co.
Box 151
West Warwick, RI
Contact: Paul Boghossian
telephone: (401) 828-1100

Ecolab
John Barkala
New Jersey
telephone: (201) 636-2100
* reusable wood pallets
* only accepts specific sizes:
  40 x 48, 40 x 40, 48 x 48

Interstate Pallet Co.
50 Eddy
New Haven, CT
Contact: Joe Nacca
telephone: 865-7543

NRS Carting
P.O. Box 783
So. Norwalk, CT 06856
Contact: George LeBlanc
telephone: 853-7570
* chips wood waste

Recycled Wood Products
RD #3 Box 548A
Hurffville, NJ
Contact: Steve Eisenhower
telephone: (609) 589-1501

Recycled Wood Products
25 Atlantic Ave.
Woburn, MA
telephone: (617) 933-3818

Reliable Pallet
127 Park Avenue
East Hartford, CT
telephone: 528-8753

Southern Connecticut Pallet Co.
417A Washington Ave.
North Haven, CT
telephone: 239-6622

Star Recycling Division
Allied Sanitation
Woodside/Queens, NY
Contact: Lou Vigliotti
telephone: (718) 497-8011
* chips for fuel

Willimantic Waste Co.
Willimantic, CT
telephone: 423-4527

Prepared by Connecticut
DEP Recycling Program
August 1988

CONNECTICUT RECYCLES!

NEW YORK

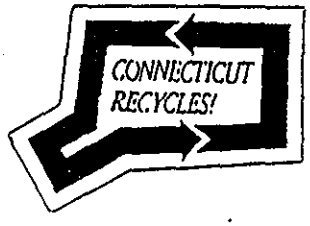
Anchor Glass Container Corp.
1901 Grand Central Ave.
Elmira, NY 14902
telephone: (607) 737-3531

Central New York Bottle Co.
RD#6, County House Road
Auburn, NY 13021
telephone: (315) 255-5201

J. Bass & Sons
9-11 Carolton Ave.
Mt. Vernon, NY 10550
contact: Bob Bass
telephone: (914) 667-1442

Owens-Illinois/Brockway Glass
Great Bear Road, RD#5
Fulton, NY 13069
telephone: (315) 598-0931

Prepared by Connecticut
DEP Recycling Program
September 1989



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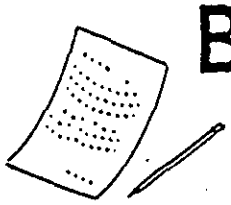


BUSINESS RECYCLING

A DEP Recycling Program Fact Sheet

GLASS RECYCLING MARKETS

The Department is aware of the following glass markets in Connecticut and nearby states. These markets accept color separated container glass, free of contaminants such as ceramics, stones, gravel, etc. Some companies allow metal rings and caps. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

CONNECTICUT

Connecticut Container Recovery
Corp./REI
150 Colonial Road
Manchester, CT 06040
contact: Bill Leonard
telephone: 646-7573

Diamond Bathurst, Inc./
Anchor Glass Corp.
Route 101
Dayville, CT 06241
contact: Ms. Dale Johnson
telephone: 774-9636

Stratford Baling Corp.
80 Garfield Ave.
Stratford, CT 06597
contact: John Mastroianni
telephone: 377-7491
* will consider accepting color separated glass from paper accounts

MASSACHUSETTS

Foster-Forbes Glass
National Can Co.
1 National Ave.
Milford, MA 01757
contact: Gene Riggs
telephone: (617) 478-2500
* prefer cullet

New England CRINC
74 Salem Road
North Billerica, MA 01862
contact: Bob Torriere
telephone: (508) 667-0096
* accepts unprocessed glass

NEW JERSEY

Ball Glass Container
1 Minue Street
Cateret, NJ
contact: Kevin Shipley
telephone: (201) 969-1400
* accepts clear glass only
* prefer cullet

Owens- Illinois/Brockway
Center Street
Freehold, NJ 07728
contact: Roger Wangerien
telephone: (201) 462-6500
* prefer to crush

Pace Glass, Inc.
73-75 Cornelison
Jersey City, NJ 07304
contact: Vinnie Pace
telephone: (201) 432-7983

(over)

Alderman-Dow Iron & Metals
358 Chapel St.
New Haven, CT 06511
contact: Norman Alderman
562-1594

H. Bixon & Sons
808 Washington Ave.
New Haven, CT 06519
contact: David Bixon
777-7445

Calamari Brothers
20 Trumbull St.
New London, CT 06320
contact: Paul Calamari
442-5794

Environmental Maintenance
75 East Aurora St.
Waterbury, CT 06708
754-2111

MJ Metals
561 No. Washington Ave.
Bridgeport, CT 06604
contact: Jeff Dreyer
334-3484
* accept all municipal scrap & metal food containers

Ostrinsky Inc.
731 Parker St.
PO Box 128
Manchester, CT 06040
contact: Sandy
643-5879

Reynolds Aluminum Co.
117 Murphy Rd.
Hartford, CT 06114
contact: Alexander Polgardi
278-6136
* aluminum only

Rubino Brothers
560 Canal St.
Stamford, CT 06904
323-3195

Suisman & Blumenthal
500 Flatbush Ave.
Hartford, CT 06106
contact: Bob Tyrol
522-3123

Prepared by Connecticut
DEP Recycling Program,
January 1990
Contact: Lynn Stoddard, 566-8722

J.W. Green Co.
2676 So. Washington St.
Plainville, CT 06062
contact: George McAdoo
747-5514

Jacob Brothers
1240 Seaview Ave.
Bridgeport, CT
contact: Joel Jacob
367-5341
* no light iron or mixed scrap

S. Kasowitz & Sons, Inc.
149 Front Ave.
West Haven, CT 06516
contact: Steven Kasowitz
932-5978

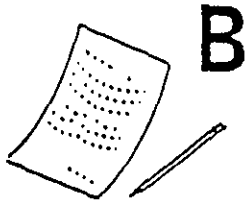
Lajoies
Meadow Street
South Norwalk, CT
866-6650

Schiavone & Sons
234 Universal Dr.
North Haven, CT 06473
contact: Joe Anstatia
777-2591

Schiavone - Bonomo Corp.
640 Canal St.
Stamford, CT 06902
contact: Tony Avani
324-3411

Shetucket Iron & Metal Co.
New Wharf
Norwich, CT 06360
contact: Walter Cedar
887-1681

Stanley Sack Co.
30 Barber Pond Rd.
Bloomfield, CT 06002
contact: Mark Sack
242-6228



BUSINESS RECYCLING

A DEP Recycling Program Fact Sheet

Recycling Scrap Metal

Scrap metal has been designated for recycling in accordance with Connecti Mandatory Recycling Act. The recycling regulations define scrap metal as "usec discarded items which consist predominantly of ferrous metals, aluminum, brass, cop lead, chromium, tin, nickel or alloys thereof, including, but not limited to, white goods . metal food containers." After January 1, 1991, scrap metal must be separated recycling.

Many industrial and commercial facilities have significant amounts of waste classified as scrap metal. (For the purposes of this fact sheet, metal food containers will not be considered because another fact sheet discusses methods of recycling those items.) These businesses will be responsible for making arrangements to recycle the scrap metal they generate.

Large generators of scrap metal who have sufficient space can separate the material on site to meet market specifications and transport it directly to a scrap metal processor. Those who generate smaller amounts and/or face serious space constraints can contract with a private hauler to collect the scrap metal (commingled with other commercial recyclables such as corrugated paper, pallets, plastics, etc.) , sort it at another location and market it. Scrap metal should not be commingled with bottles and cans or non-recyclable trash. Small generators may find it advantageous to share storage facilities and hauling arrangements with other businesses in their building complex or industrial park.

Regardless of the method selected, it is important to handle the metals carefully because some industrial/commercial machinery and appliances contain small PCB capacitors, PCB transformers, or hydraulic fluids. These contaminants need to be removed before most scrap dealers will accept the metal. The DEP has developed an educational program which trains individuals to identify, locate, remove and dispose of PCB capacitors. For information on this program, contact Carey Hurlburt at 393-2449 or 566-2852.

Although a complete listing of scrap metal dealers can be found in the *Business to Business Yellow Pages*, the following scrap metal dealers have indicated a willingness to accept municipal scrap metal if prepared to their specifications. As with any recovered material, a better price is paid for large quantities of properly segregated metals. Contact dealers directly to learn what types of metals they accept, transportation and equipment available, preparation requirements, and price quotes. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

Albert Brothers
225 E. Aurora St.
Waterbury, CT 06721
contact: Dave Bessette
753-4146

Joseph Freedman Co.
40 Albany St.
Springfield, MA 01101
contact: Dick Boucher
522-6395

The following list includes local waste paper processors, and waste paper dealers that the Department is aware of. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

Automated Materials Handling, Inc.
655 Christian Lane
Kensington, CT 06037
Contact: Bob Patterson
(203) 249-0686
*all types & grades

Cassone Paper Stock Co.
420 John Fitch Blvd.
South Windsor, CT
Contact: Victor Goldstein
(203) 528-9278
*high grades only

Fairfield County Newspaper
180 Watson Boulevard
Stratford, CT 06497
Contact: Joseph Sabatini
(203) 375-8000
*clean newspaper only

Ferraro Bros., Inc.
335 Central Ave.
Bridgeport, CT 06607
Contact: Bob Ross
(203) 335-5161
*high grades only

Marcus Paper Co.
First Ave. & Wood St.
P.O. Box 8986
New Haven, CT 06532
Contact: Michael Zamkov
(203) 934-6351
*high grades & computer

New England Paper Recycling Ctr
600 Atlantic St.
Stamford, CT 06902
Contact: Michael Tomasello
(203) 629-1702
*all office waste paper

Newhallville Recycling, Inc.
5 Science Park
New Haven, CT 06511
Contact: Ramu Ramiah
(203) 786-5032

Ostrinsky, Inc.
731 Parker St., P.O. Box 128
Manchester, CT 06040
Contact: Sandy
(203) 643-5879

Recycled Fibers of Connecticut
260 Tolland Turnpike
Manchester, CT 06040
Contact: Angello or David
(203) 647-7096
* no newspaper

Stratford Baling
80 Garfield Ave.
Stratford, CT
Contact: John Mastroianni
(203) 377-7491
*all types & grades

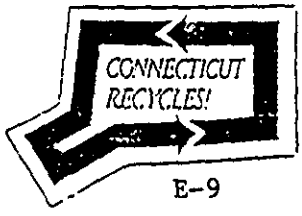
B. Swirsky & Co.
260 Railroad Hill St.
Waterbury, CT 06721
Contact: David or Joseph Swirsky
(203) 574-3131

United Paper & Metal Co.
Stockhouse Rd.
Fitchville, CT 06334
Contact: Harold Kirstein
(203) 886-5511
*all types & grades

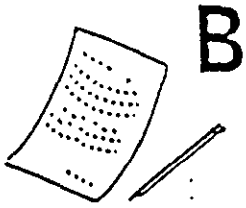
M. Wilder & Sons, Inc.
569 North Colony St.
Meriden, CT 06450
(203) 235-4225
*newspaper

Willimantic Waste Paper Co.
P.O. Box 4239
Willimantic, CT 06226
Contact: James DeVivo
(203) 423-4527

Prepared by Connecticut
DEP Recycling Program
June 1990



For more information
contact: Anne Gobin
566-8722



BUSINESS RECYCLING

A DEP Recycling Program Fact Sheet

WASTE PAPER RECYCLING & MARKETS

Paper constitutes the largest single component of the municipal solid waste stream--approximately one third by weight and one half by volume. Therefore, paper recycling can significantly reduce the amount of waste that has to be disposed of in Connecticut. Although a certain level of waste paper recycling exists, a significant amount of waste paper has yet to be recovered in Connecticut.

Waste paper is traded on a world-wide commodity basis through a network of brokers and exporters. The paper market has stringent quality requirements for its 49 grades of paper stock and another 31 specialty grades. The four categories of paper recycling programs need to be concerned with are:

Corrugated cardboard used to ship merchandise. For maximum value, contaminants such as styrofoam packing material, metal, wax, plastic coated cartons, and junk should be removed.

Old newspaper as is delivered to a household. Newspaper must be clean, dry, and stored out of direct sunlight. Contaminants such as junk mail, plastic bags, telephone books, magazines, etc. should be removed.

High grade office paper includes white typing, writing and copy paper, white scratch paper, tab cards, index cards, and computer paper. Prohibited materials include carbon paper and NCR forms, blueprint paper, tape and glue, post-it notes, newspaper, corrugated, tissues, towels, and paper cups.

Mixed paper office paper recovered from offices and institutions in an unsorted, but clean form.

Waste paper recovered from mixed municipal waste generally does not meet industry specifications for use by paper mills in the United States. Best results are achieved through source separation programs. Paper markets fluctuate with supply and demand. When the supply of waste paper is plentiful, markets retain suppliers of high quality materials who can guarantee large tonnages of clean paper free of contaminants. Therefore, it is advisable to design source separation programs to maximize quality and quantity of waste paper.

The paper processors in Connecticut listed on the reverse side have facilities to sort, bale and transport waste paper. Not all processors deal in all grades of waste paper. Paper brokers are in contact with mills and know the baling and quality specifications of paper mills. Brokers determine who is buying and selling each grade of paper and facilitate sales by arranging transportation and payment. The Connecticut paper brokers know the needs and specifications of the Connecticut mills as well as other northeast, U.S. and international users of waste paper.

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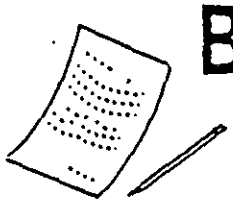


BUSINESS RECYCLING

A DEP Recycling Program Fact Sheet

Waste Oil Recycling

What is Waste Oil?

"Waste Oil" is defined in the Mandatory Recycling Regulation (Section 22a-241b-1 of the Regulations of Connecticut State Agencies) as "crankcase oil that has been utilized in internal combustion engines."

How to Collect Waste Oil

If your business uses a small number of vehicles, service stations that change the oil in these vehicles should have provisions for recycling it. If your business uses and maintains a fleet of vehicles, you should establish a collection tank where you can safely store the oil before contacting a licensed transporter to haul it to a recycling facility. If you are only storing oil from your own business and do not accept oil from outside sources, you do not need a permit to install a collection tank, but the tank should be designed and managed in accordance with the guidelines listed below.

Tank Location, Design, and Management

Follow the guidelines below in siting, designing, and managing a used oil storage program:

* Locate the tank in an above ground area that will minimize unauthorized access, vandalism, fire/explosion possibility, and release of oil to the environment.

* Place the tank on an impervious base that provides for secondary containment equal in volume to the capacity of the storage tank.

* Keep the tank locked when not in use.

* Appoint one person to be responsible for monitoring oil storage and contacting a licensed waste oil transporter to haul the oil to a treatment facility for processing. This person should visually inspect the tank on a regular basis for leaks or malfunctions.

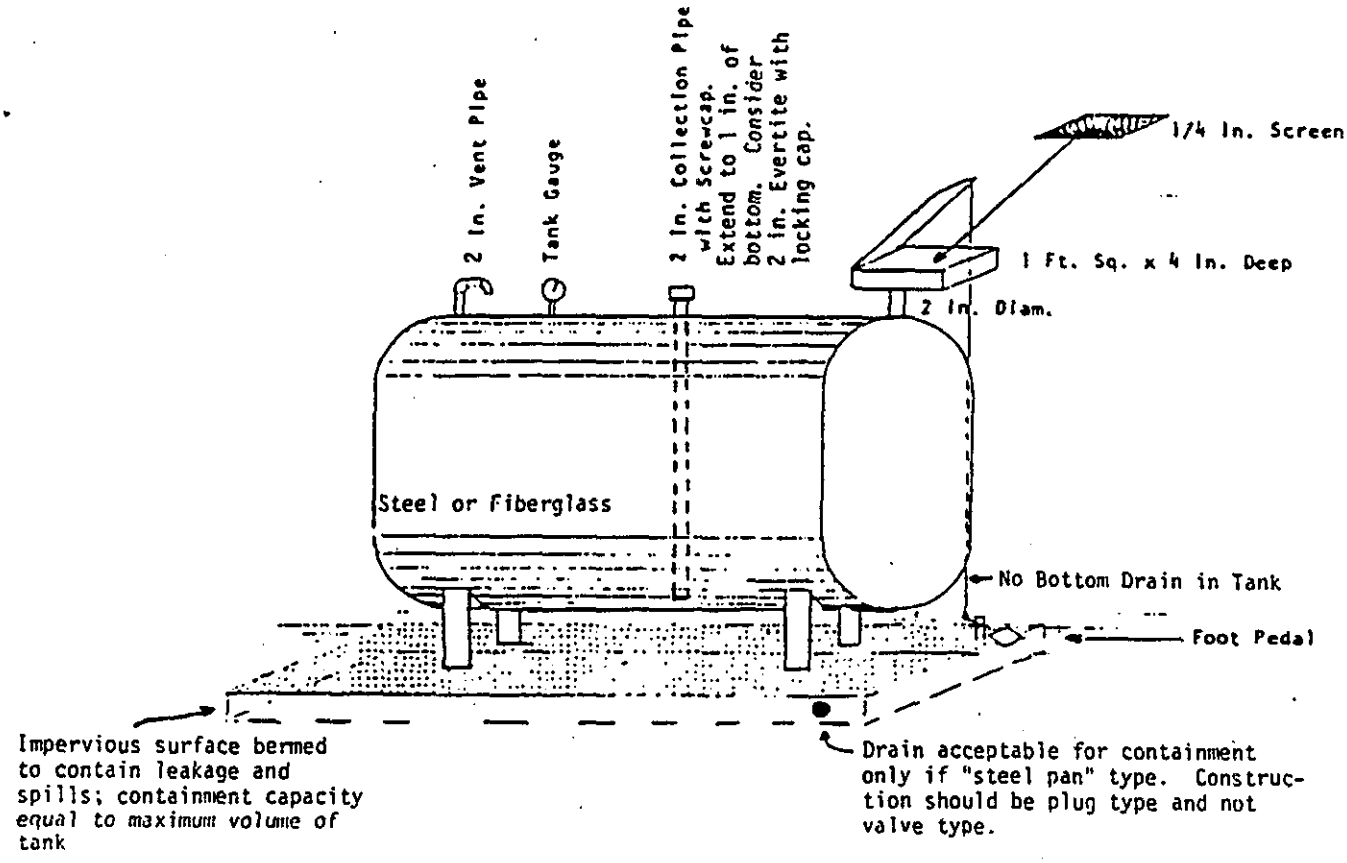
* Do not mix gas, paint thinners, solvents, pesticides, anti-freeze, or other hazardous materials with oil.

* Employees who handle used oil should be instructed about the proper operation and management of the oil storage area.

* Use kitty litter, saw dust, or a commercially available product to absorb oil from minor spills.

* Prepare a contingency plan describing the action that the tank manager and other personnel must take in response to vandalism, theft, fires, explosions, or release of oil to the environment. The plan must contain the names, addresses and phone numbers of, and describe the arrangement agreed to by local police and fire departments, contractors, and state and local emergency response teams in case of emergency. Federal law requires a spill prevention and countermeasures plan for any collection facility that has an aggregate storage of greater than 1,320 gallons or a single above-ground tank having a capacity greater than 660 gallons.

Typical Waste Oil Collection Tank Design



What To Do Once You Have Collected Waste Oil

You should contact a DEP-licensed commercial waste oil transporter to haul your waste oil to a treatment facility for processing. (See attached list entitled "Transporters permitted to haul waste oil and/or waste water soluble oil.") Used oil can be re-refined into high quality lubricating oil, reclaimed, treated, and used as feedstock in the manufacture of other products, or reprocessed as fuel oil.

In addition, service stations and other commercial establishments may burn the used oil that they generate (but not oil accepted from other sources). Oil burners must meet certain design standards and the oil must meet fuel specifications. Contact George Dews of the DEP at 566-4869 for information on the requirements for burning waste oil.

Prepared by Connecticut
DEP Recycling Program
January 1990

CONNECTICUT RECYCLES!

For more information
contact: Lynn Stoddard
at 566-8722, or George
Dews at 566-4869

If your business sells lead acid batteries retail or wholesale...

PA 90-248 places the following requirements on retailers and wholesalers of lead acid batteries:

No retailer shall dispose of a used battery except by delivery to one of the following: 1) a wholesaler, 2) a battery manufacturer for delivery to a secondary lead smelter permitted by the US EPA, 3) a recycling center, 4) a secondary lead smelter permitted by the US EPA, or 5) a scrap metal processor.

From Oct. 1, 1990 - April 1, 1992, retailers must accept up to 3 used batteries from a consumer (even if the consumer does not purchase a battery). A deposit refund is only required if the consumer presents a receipt.

Each retailer must post a written notice at his/her place of business advising customers that: it is illegal to discard a battery with solid waste; batteries must be recycled; the retailer must accept up to 3 batteries from a consumer (even if he/she is not purchasing a new battery) until April 1, 1992; after April 1, 1992, the retailer must accept a used battery for recycling in exchange for the purchase of a new battery. This notice must be at least 8-1/2 inches wide and at least 11 inches long.

All unclaimed deposits shall accrue to the retailer.

A wholesaler must accept at the point of transfer used batteries from retailers or consumers (as many as the number of new batteries purchased).

Wholesalers must remove batteries from the retail point of collection within 90 days.

Penalties are established for violations of these requirements.

If retailers and wholesalers need information on how to properly handle and store lead acid batteries, call the DEP Recycling Program for a copy of the DEP Fact Sheet entitled "How to Recycle Lead Acid Batteries" and/or call George Dews of the DEP at 566-4869.

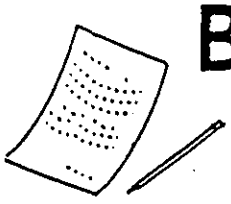
How are lead acid batteries recycled?

Battery recyclers separate the useable components of the battery and reclaim the lead, most of which is used to make new batteries. Small percentages of recycled lead can also be used in such products as lead shot, radiation shielding, and grease compounds. The acid from the batteries is either recycled or neutralized and disposed of. The plastic battery case can also be recycled.

Prepared by Connecticut
DEP Recycling Program
July 1990

For more information
contact: Lynn Stoddard
at 566-8722

PRINTED ON RECYCLED PAPER



BUSINESS RECYCLING

A DEP Recycling Program Fact Sheet

How to Recycle Lead-Acid Batteries

Recycling lead acid batteries: What is required?

PA 87-544 and the recycling regulations require the recycling of "storage batteries" in Connecticut by January 1, 1991. Storage batteries include lead acid batteries used in motor vehicles (such as automobiles, airplanes, boats, recreational vehicles, and tractors). In 1990, PA 90-248 established a mandatory deposit and redemption system that will capture lead acid batteries for recycling and prohibits the disposal of used lead acid batteries with mixed municipal solid waste by October 1, 1990.

If your business uses and maintains a fleet of vehicles, you will need to arrange for the recycling of lead acid batteries. After October 1, 1990, used batteries can be delivered to the following facilities for recycling:

1) Retailers or wholesalers. Between October 1, 1990, and April 1, 1992, retailers must accept up to 3 used batteries from a consumer (even if the consumer does not purchase a battery). After October 1, 1990, any person who purchases a battery shall return a used battery or pay a $5 deposit for each new battery purchased. A $5 refund shall be given if a used battery is returned within 30 days after purchase of a new battery and the consumer has a receipt.

2) A recycling facility, secondary lead smelter permitted by the US EPA, or scrap metal processor. If your business generates large quantities of used lead acid batteries (this would apply to service stations, for example), you should store them properly and arrange to have them recycled by one of the types of facilities listed above. Call the DEP for a fact sheet entitled "How to Recycle Lead Acid Batteries" which describes how properly to handle and store batteries. Depending on market conditions, you may receive a payment for your batteries. You will not receive a refund of any deposit paid because the refund requirement applies only to retailers.

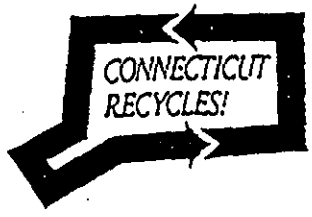
3) A municipally established collection site. Call the recycling coordinator or public works director for your town to see if there is a municipal collection site where businesses can drop off used lead acid batteries. Because the $5 refund from battery deposits is available from retailers only, do not expect to receive any payment for your batteries from a municipal recycling program.

Common Contaminants To Corrugated

Your paper processor or market (mill) will help you make the final determination regarding which materials are unacceptable, but the following is a typical list:

- **Packing material** - such as polystyrene foam pellets
- Excessive amounts of **plastic tape or plastic packing envelopes** (*small amounts ok*)
- **Wood** stapled or otherwise attached to the box
- **Non-paper insulation layer** between the layers of corrugated
- **Metal** (generally, small numbers of staples *do not* have to be removed)
- **Wax or plastic coated corrugated** (usually used to pack produce, usually darker and shinier than uncoated corrugated)
- Other **extraneous materials** - material stored in boxes, sweepings, etc.
- **Asian corrugated** - is not acceptable for most recycling purposes at this time. you can distinguish Asian corrugated by its yellow/green tinge (usually used for products shipped from Asia). Check with your paper processor or market about the acceptability of this particular material.

Prepared by Connecticut DEP Recycling Program
January, 1990
Contact: Judy Belaval



compacting (larger generators), or backhauling the loose corrugated to a central distribution center for baling or compacting (for stores that are part of a chain). You can really get innovative and perhaps come up with a plan for smaller businesses picking up merchandise at wholesalers to backhaul their corrugated there for compaction or baling.

To Bale Or Not To Bale

Small businesses, who generate only minimal amounts of corrugated, may find it more economical to manually bundle or store the loose corrugated in an appropriately sized container and have it collected either by a town or cooperatively contracted hauler, or a business may choose to use its own vehicles, and have the corrugated delivered to a private or municipal drop-off site.

For businesses generating larger quantities of corrugated, the decision to simply use storage containers, or to bale or compact and the choice of bale size, should be made on a case by case basis. Generally speaking, both baling and compacting improve ease of handling, and by densifying the material reduce storage space requirements (one must also consider the size of the equipment when assessing the affect on storage requirements) and allow greater quantities of corrugated to be carried per haul, thus reducing hauling costs.

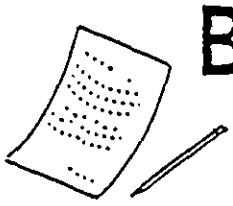
Compactors are usually more expensive than balers and usually require a lot more space than most balers. There is usually better quality control with balers than compactors, because more attention is paid to the materials being placed into the baler. However, many of the smaller balers and some of the more inexpensive larger balers do require hand tying of the bundles, and do have labor requirements associated with their operation. Also, if you do decide to use a baler, check the size of its chamber to assess the necessity of cutting the corrugated to make it fit into the baler. Baled corrugated is not necessarily worth more per ton than loose or compacted corrugated since bales smaller than "mill size" (at least 1,000 lbs) must be broken open and rebaled by the paper processor. For your guidance, lists of baler and compactor manufacturers are presented on the next page.

When making a decision, consider:

* the relative labor requirements of the various methods
* the quantity of corrugated generated
* type and amount of available storage space
* space requirements for the different types of storage/processing equipment
* comparative costs of renting or buying a baler, compactor, dumpster, or trailer
* hauling arrangements (including price per haul)
* markets for the corrugated (i.e. paper processor or directly to a mill)
* distance from a market, and
* market value of the corrugated.

Contact your paper processor, hauler, or market to help you determine the system appropriate for your facility.

Remember by collecting clean corrugated for recycling you will be saving Connecticut landfill space and at the same time you'll be decreasing your business's trash disposal costs.



BUSINESS RECYCLING

A DEP Recycling Program Fact Sheet

CORRUGATED CARDBOARD

Corrugated cardboard[1] represents a significant percentage of the commercial solid waste generated: from 10%, in a public or institutional setting to 40% or more in a retail establishment[2]. Actual corrugated generation rates have been approximated[3] as follows:

Business type	Corrugated generated
Small convenience stores	1 to 2 tons/month
Grocery stores/supermarkets	up to 8 tons/month
Furniture stores	4 to 6 tons/month
Warehouse stores	4 to 6 tons/month
Department stores	4 to 6 tons/month
Home improvement centers	4 to 6 tons/month
Warehouse distribution centers	8 to 10 tons/week

By recycling your corrugated, instead of discarding it, you'll be conserving landfill space and saving refuse tipping fees.

The recycling of corrugated containers is easy and simple to implement. It involves: source separation from the refuse stream; preparation to minimize contamination and improve ease of handling; storage; and delivery to a paper processor or mill (see Fact Sheet on Waste Paper Recycling and Markets) to be recycled into various recycled paper products such as unbleached kraft paperboard, the center fluting of corrugated boxes, and recycled paperboard.

There are many possible methods for handling corrugated. At a minimum, storage facilities must be easily accessible to building maintenance personnel and haulers and must comply with fire codes. Corrugated boxes should be opened and flattened and contaminants removed before being placed in the storage container. A list of common contaminants is presented on the reverse side of this fact sheet. Remember, the cleaner the material, the more marketable it is.

Once the contaminants are removed, your system for handling the corrugated may be as simple as placing the loose flattended corrugated into a dumpster. Other options include manually bundling the corrugated, mechanically baling or

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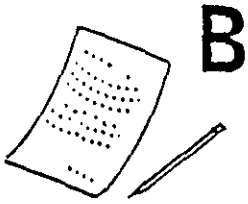
[1] Information from various paper processors in Connecticut and Publications of the American Paper Institute in NYC [*How to Recycle Waste Paper* (1985) and *Paper Recycling and Its Role In Solid Waste Management* (1987)]

[2] From a study of the commercial waste sector in Westchester, from: "Developing Recycling Programs for Commercial Establishments" - David Cerrato and Barbara Riley, Malcolm Pirnie, 1989

[3] Figures derived by Load King - a baler manufacturer



BUSINESS RECYCLING

A DEP Recycling Program Fact Sheet

Recycling Newspapers At Work

Newspapers have been designated for recycling in accordance with Connecticut's Mandatory Recycling Law. Newspapers typically include daily, weekly and monthly publications printed on newsprint. Newspapers do not include glossy catalogues, mail, magazines or similar printed materials. Although some paper processors will accept other materials mixed with newspaper, it is generally best to train people to separate only the newspaper and the inserts that come in it. This helps to guarantee that the old newspapers (ONP) will be desirable to a recycler.

After January 1, 1991, newspapers will be required to be source separated for recycling in accordance with ordinances adopted by Connecticut municipalities. Although the vast majority of newspapers are expected to be collected from people's homes, businesses and institutions will also have to make provisions to be sure that newspapers are recycled if they are generated in the work setting.

The type of program developed will depend on the number of newspapers that need to be handled. In small offices and industries, probably the simplest way to achieve the recycling of newspapers is to require employees who bring newspapers to work to take them home again for recycling through the residential recycling system. Businesses like newspaper dealers, printers and publishers will need to make an arrangement with their newsprint suppliers to take back overruns or defective stock or arrange for the direct delivery of these items to a paper processor.

Larger offices and those which take subscriptions as part of their business efforts will need to set up one or more collection points. This collection system can mirror that which is established for white office paper (see the DEP guide to white paper recycling: CONNECTICUT RECYCLES OFFICE PAPER), but will be more limited since the quantities involved will probably be much smaller. A drop-off point at the exits or on each floor may suffice. In addition, a larger storage container will also be necessary to aggregate the material for delivery to a processor or market. As with the white paper collection, the collection and storage containers for newspaper must be kept dry, be well marked, and be in compliance with fire codes.

You should contact your municipal or regional recycling coordinator to determine specific municipal requirements and to see whether you can utilize the community system for processing and marketing the newspaper you collect. The community may provide a drop-off point where you can take the papers, or you may be able to arrange with your hauler or a community organization to deliver them to an intermediate processing center or waste paper dealer.

A list of paper processors that accept ONP is included on the reverse side of this fact sheet. You should contact them to learn their exact specifications.

Processors

Automated Material Handling, Inc.
Kensington, CT
Bob Patterson, 249-0686

Fairfield County Newspaper
Stratford, CT
Joseph Sabatini, 375-8000

Stratford Baling
Stratford, CT
John Mastroianni, 377-7491

Swirsky & Co.
Waterbury, CT
David Swirsky, 574-3131

United Paper & Metal
Fitchville, CT
Harold Kirstein, 886-5511

Willimantic Waste Paper Co.
Willimantic, CT
James DeVivo, 423-4527

Mills

Federal Paper Board
Sprague, CT
Pete Birnie, 822-8201

Lydall and Foulds
Manchester, CT
Don Cossette, 646-1233

Rand Whitney Paper Board
Montville, CT
William Bartlett, 848-9231

Simpkins
New Haven, CT
Frank Camera, 787-7171

Prepared by Connecticut DEP Recycling Program
May, 1990
Contact: Jacquelyn Pernell, 566-8722

APPENDIX F

MANAGEMENT OF OZONE-DEPLETING SUBSTANCES

CHAPTER 10 - MANAGING OZONE DEPLETING SUBSTANCES (ODS) AT USACE PROJECTS AND FACILITIES

10-1. Purpose. This chapter establishes guidance for managing ODSs at USACE projects and facilities.

10-2. Applicability. This chapter applies to all USACE commands having responsibility for civil works funded activities, including floating plant. USACE research and development laboratories and other facilities that are wholly or substantially military funded but not located on military installations shall adapt the ozone-depleting substance guidance in AR 200-1, Environmental Protection and Enhancement, in coordination with CECW-OA. USACE facilities located on Army installations will comply with the installation commanders' ozone-depleting substance elimination program requirements.

10-3. Guidance.

a. Executive Order 12843 established a policy of the Federal government to implement cost-effective programs to minimize procurement of materials and substances that contribute to the depletion of stratospheric ozone and give preference to the procurement of alternative chemicals, products and manufacturing processes that reduce overall risks to human health and the environment by lessening the depletion of ozone in the upper atmosphere.

b. The Army's objective is to end dependence on ODS use in equipment and processes so that the pending phaseout of Class I ODSs causes minimal impact on Army missions. Although the Class I phaseout applies to chemical production and import only, and does not apply to their use, EO 12843 and Army policy do. Class I Substances list can be found in 40 CFR Part 82, Appendix A.

c. The key to efficiently eliminating ODSs from USACE projects and facilities is developing and implementing comprehensive ODS elimination plans. Operations project managers or facility managers should develop and execute ODS elimination plans addressing applicable facilities and equipment. Advance planning for phaseout of ODSs will minimize impact on individual projects and facilities. The following paragraphs describe the steps involved in ODS elimination planning.

(1) Step 1: Assign an ODS Elimination Coordinator

(a) It is recommended that MSC commanders and District commanders designate an ODS coordinator in the Operations element since most of the affected facilities and equipment are at operating projects. Laboratories and FOAs should also designate ODS coordinators. The intent is to provide senior leadership with a responsible individual to monitor execution of ODS elimination efforts throughout the division, district, laboratory, FOA, etc.

(b) ODS coordinators should be knowledgeable of USACE policies, and Federal, state and local regulations concerning ODSs, and familiar with the operations and maintenance of projects and facilities, especially those having refrigeration, air conditioning, and fire suppression systems. The ODS coordinator should also be familiar with the planning, programming and budgeting processes.

(c) It is further recommended that operations project managers and facility managers appoint an individual to oversee and coordinate their ODS elimination efforts.

(2) *Step 2: Inventory ODS Equipment and Supplies*

(a) The first task is to assemble an accurate inventory of all equipment which uses ODSs and an inventory of all ODS supplies on hand. The equipment inventory should include air conditioning, refrigeration and fire fighting systems, and all other ODS applications. These inventories will serve as the baseline for ODS elimination planning. The following information should be gathered as part of the equipment inventory process:

- Location of equipment - area, building, and room
- Ownership - determine if equipment is project, PRIP, logistics or personal property
- Equipment type - manufacturer, model, and serial number of affected components
- Chemical used - identify the ODS used and amount of chemical contained in the system
- Operating record - include the date of installation and operating conditions of the system which apply primarily to air conditioning and refrigeration units
- Maintenance record - include scheduled maintenance actions, emergency repairs, leaks, major overhauls and chemical recharges. The history of chemical requisition may be useful to supplement maintenance records
- Future Plans - such as upcoming scheduled maintenance, building renovation, demolition plans or facility realignment

(b) The information collected should include project and facility supplies and at least the following information:

- Chemical type - chemical name, new or recycled product (for quality control)
- Storage location - building location and ownership
- Allocation - chemical dedicated for a specific use
- Amount - total chemicals at that location, volume, weight, number of containers

(c) The equipment and chemical stock inventories should be prepared in a format that can be updated over the course of the ODS elimination program. Periodic inventories are required.

(3) Step 3: Conservation Measures

(a) The next phase of the ODS elimination planning is establishing maintenance processes aimed at conserving and recovering ODS chemicals. Conservation measures, such as leak prevention, will be a major priority of the on-going maintenance. By preventing leaks, the

project or facility will have to procure fewer ODSs to replenish systems and will have a larger recoverable supply for reuse. For refrigeration and fire fighting systems, periodic checks using a specialized chlorine detector may be preferable. For air conditioning systems, especially those in detached mechanical rooms, a fixed detector may provide better protection against leaks. Fixed fire suppression systems can be checked by monitoring cylinder pressure gauges. If leakage does occur, the systems must be repaired immediately. Without a detection system, leakage might progress to the point of reduced operating efficiency.

(b) Another conservation measure that can be implemented is the installation of high efficiency purge units on centrifugal air conditioning systems. The high efficiency purges prevent the venting of Chlorofluorocarbons (CFCs) during normal operation. These purges are a low cost method to conserve refrigerant and may be considered for equipment not immediately scheduled for retrofit or replacement.

(4) Step 4: ODS Recovery and Reuse

(a) After establishing accurate inventories, the operations project manager or facility manager should then do an analysis or evaluation of each ODS application. Based on these evaluations, decisions can be made regarding how to deal with each ODS being used.

(b) Halons installed in power distribution systems, computer facilities and other electronic systems should be recovered. CFCs should also be recovered from project or facility systems when retrofit or replacement occurs. CFCs recovered from projects or facilities may be reused at the same project or facility. CFCs should also be recovered, reclaimed and reused if the project or facility determines the expense of recovery and reclaiming equipment to be worthwhile as an interim alternative to disposing used ODS solvents.

(5) Step 5: Building the Elimination Plan

(a) With the information gathered from steps 1 through 4, operations project managers or facility managers can build ODS elimination plans. The schedule for retrofitting or replacing equipment should be based on a priority assessment.

(b) Retrofit refers to the modification of existing equipment so it can operate effectively with an alternative chemical. Recovery of the Class I ODS chemical and recharging the system with the replacement chemical is only part of the retrofit action. Frequently, additional system components should be replaced during retrofit actions. For example, fire fighting system nozzles and air conditioner lubricant should be compatible with the new chemicals used. The complexity and cost of these modifications should be evaluated when deciding between retrofit and replacement options.

(c) Replacement is the complete removal of an existing ODS dependent system and installation of a new system that uses an environmentally acceptable alternative chemical. In some cases, ODS containing equipment may no longer be needed and can be eliminated using approved disposal procedures. Only hermetically sealed ODS systems, such as water coolers and refrigerators, which require no ODS additions during maintenance, will be allowed to continue operating indefinitely and eventually be replaced through normal attrition and eliminated using approved disposal procedures.

(d) Decisions on whether to retrofit or replace hardware will be based on factors such as cost, condition, age, performance, and safety. Based on the information gathered during the inventory, the project or facility manager can determine which systems are in need of immediate attention, and which will be efficient and useful for a longer period. Those systems judged to be high priority for major maintenance should be retrofitted or replaced before those systems which are operating well. Listed below are some factors to consider when prioritizing and scheduling retrofits and replacements.

High Priority System Indicators:

- Frequent recharges, leaking components
- Obsolete, inefficient equipment
- Equipment near end of life in hours use or age
- Frequent maintenance and repair required
- Building modernization scheduled

Low priority system indicators:

- Recent Installation
- Low maintenance, infrequent repair required
- CFC-13 refrigerant (no option available)
- System resistant to retrofit

10-4. Yearly Updates. Operations Project Managers and facility managers should update their ODS elimination plans in advance of each annual budget cycle to reflect projected costs, plus justification for necessary resources, and provide input to the budget process. The updated yearly plan should reflect both accomplishments and unfinished requirements for eliminating ODSs.

10-5. Resourcing ODS Elimination. There is no special funding for ODS elimination. ODS elimination requirements should be included in the applicable budgeting process. Using the methodology described in this guidance, project and facility plans can be developed to totally eliminate Class I ODSs.

CHAPTER 10 - MANAGING OZONE-DEPLETING SUBSTANCES AT USACE PROJECTS AND FACILITIES

10-1. Purpose. This chapter establishes the policy for managing ozone-depleting substances (ODSs) at civil works projects and facilities.

10-2. Applicability. This chapter applies to all USACE commands having responsibility for civil works functions, including floating plant. USACE research and development laboratories and other facilities that are wholly or substantially military funded but not located on military installations will adapt the ozone-depleting substance guidance in AR 200-1, Environmental Protection and Enhancement, in coordination with CECW-OA. USACE facilities located on Army installations will comply with the installation commanders' ozone-depleting substance elimination program requirements.

10-3. Policy.

a. It is the policy of USACE, in conformance to Executive Order (EO) 12843, to:

(1) implement cost-effective programs to minimize the procurement of materials and substances that contribute to the depletion of stratospheric ozone; and

(2) give preference to the procurement of alternative chemicals, products, and manufacturing processes that reduce overall risks to human health and the environment by lessening depletion of ozone in the upper atmosphere.

b. In implementing this policy, procurement practices will conform to the general requirements of Title VI of the Clean Air Act Amendments by:

(1) minimizing, where economically feasible, the procurement of products containing, or manufactured with, Class I substances in accordance with EPAs phaseout schedule and maximizing the use of safe alternatives;

(2) amending existing contracts to the extent permitted by law and, where practical, to be consistent with the phaseout schedules for Class I substances;

(3) being aware of the phaseout schedule for Class II substances (Clean Air Act Amendments, Section 605) in developing procurement policies and in awarding contracts; and

(4) implementing policies and practices that recognize the increasingly limited availability of Class I substances as production levels capped by the Montreal Protocol decline until final phaseout. Such practices will include, but not be limited to:

- reducing emissions and recycling ozone-depleting substances;

- ceasing the purchase of non-essential products containing or manufactured with ozone-depleting substances; and

- requiring that new contracts provide that any acquired products containing, or manufactured with, Class I or Class II substances be labeled in accordance with section 611 of

the Clean Air Act Amendments.

c. USACE projects and facilities will establish, fund and implement management programs to support this policy. MSC commanders, district commanders and commanders/directors of facilities outside the district structure will develop internal procedures to assure compliance with all aspects of this policy. ODS Elimination Plans will be prepared for all projects and facilities where USACE has operations and maintenance responsibilities for facility needs, including government-owned, contractor-operated facilities. Production phase-out milestones are contained in the Clean Air Act Amendments and are listed in the Army Acquisition Pollution Prevention Support Office publication "Strategic Plan for Eliminating Ozone-Depleting Chemicals from U.S. Army Applications."

10-4. Program Requirements.

a. Identify sources of ODSs and determine type and amount.

b. Monitor regulated ODSs to comply with standards.

c. Procure equipment that meets applicable standards.

d. Cooperate with Federal, state, and local authorities in achieving ODS plan goals.

e. Assure that all technicians who service appliances, industrial process refrigeration units and motor vehicle air conditioner units that contain ODSs are certified by an EPA approved program in accordance with the 1990 Clean Air Act Amendments, Title VI, Section 602(a).

f. USACE organizations in General Services Administration (GSA)-leased facilities and USACE users of GSA-leased vehicles will support applicable GSA programs to eliminate ODS use in accordance with lease agreements.

10-5. Reporting and Record Keeping Requirements. Programs certifying technicians must maintain records in accordance with section (g) of appendix D of 40 CFR, Part 82.166, Reporting and Record Keeping Requirements.

APPENDIX G

RECENT CECW-OA GUIDANCE

CECW-OA 15 January 1997

COMMANDER'S POLICY MEMORANDUM #3

SUBJECT: Waste Reduction, Recycling and Priority Purchase of Environmentally Preferable and Recycled Products

1. In keeping with our goal of promoting good environmental stewardship, it is vital that we develop and sustain programs that will conserve natural resources for the benefit of present and future generations. We are, therefore, establishing a policy which emphasizes the importance of such stewardship. Major Subordinate Command commanders, district commanders, and commanders /directors outside the district structure shall initiate and/or maintain cost-effective waste reduction and recycling programs if they have not already done so.

2. The "Vision Statement," enunciated in the Department of Defense pollution prevention strategy, states that we should establish and promote efficient material and energy use practices through conservation, materials substitution, recycling, affirmative procurement of recycled products, and the creation of markets for recycled materials. All of these are measures that will conserve natural resources.

3. We believe that the basis for good environmental stewardship is a personal commitment by USACE commanders to make it work. Proper stewardship of our resources and those of our customers begins with our obligation to conserve the natural resources that have been entrusted to us. This is a standard to which everyone throughout this organization needs to be committed. Enthusiastic implementation of this policy will pay great dividends in the future as we strive to improve our services to our customers and to the Nation. Your support is essential both to beginning and continuing these programs, as well as to instilling a waste reduction and recycling ethic throughout the entire USACE community.

JOE N. BALLARD (signed)
Lieutenant General, USA
Commanding

CECW-OA 21April 1997

MEMORANDUM FOR COMMANDERS, MAJOR SUBORDINATE COMMANDS

SUBJECT: U.S. Army Corps of Engineers Facilities Environmental Compliance Guidance Letter No. 1, Waste Reduction and Recycling

1. Purpose: This memorandum, which replaces U.S. Army Corps of Engineers Facilities Environmental Compliance Guidance Letter No. 1, Solid Waste Recycling, provides guidance for development and management of waste reduction and recycling programs at USACE projects and facilities.

2. Applicability: This guidance applies to all Headquarters, USACE elements, major subordinate commands (MSCs), district commands, engineering laboratories and field operating activities (FOAs) having responsibility for Civil Works funded activities, including floating plant. USACE research and development laboratories and other facilities that are wholly or substantially military funded but not located on military installations shall adapt the guidance found in AR 200-1, in coordination with CECW-OA. USACE facilities located on Army installations will comply with the installation commander's program requirements.

3. References:

a. AR 200-1, Environmental Protection and Enhancement, 21 Feb 97

b. Executive Order (EO) 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, 6 Aug 93

c. EO 12873, Federal Acquisition, Recycling and Waste Prevention, 20 Oct 93

d. 40 CFR, Part 247, Guidelines for Procurement of Products that Contain Recycled Material

e. "Greening the Government," a Guide to Implement EO 12873, USEPA

f. Pollution Prevention Plans, Director of Civil Works Memo, 10 Aug 95
CECW-OA
SUBJECT: US Army Corps of Engineers Facilities Environmental Compliance Guidance Letter No. 1, Waste Reduction and Recycling

g. Procurement Guidelines for Government Agencies, United States Environmental Protection Agency (USEPA), December 1990, (703) 941-4452

h. The Affirmative Procurement Program, Office of the Secretary of Defense, Under Secretary of Defense (Acquisition and Technology), July 1995

i. Resource Conservation and Recovery Act (RCRA) of 1976, PL 94-580

j. USACE Facilities Environmental Compliance Guidance Letter No. 1, Solid Waste Recycling, 24 Nov 92 (rescinded)

4. Policy:

a. MSC commanders, district commanders and commanders/directors outside the district structure shall initiate and/or maintain cost-effective waste reduction and recycling programs.

b. USACE projects and facilities shall reduce waste generation and shall conserve natural resources by designing, specifying and procuring products that are environmentally preferable and/or made with recycled materials. For guidance in purchasing recycled products, refer to 40 CFR Part 247, Guidelines for Procurement of Products that contain Recycled Material (Reference d).

c. Operational Recycling Programs for USACE operated projects and facilities shall be compatible with State and local recycling requirements.

5. Definitions:

a. "Environmentally Preferable" means products or services that have a less negative effect on human health and the environment when compared with competing products or services that serve the same purpose.

b. "Recycling" means a series of activities, including collection, separation and processing by which materials that would otherwise become waste are removed from the waste stream and reused as raw materials in making new products.

c. "Solid Waste" means garbage, refuse, or sludge from a waste treatment plant, water supply treatment plant, air pollution control facility, or other discarded material including solid, semi-solid, liquid or contained gaseous material resulting from industrial, commercial, mining, agricultural or community activities. It does not include solid or dissolved material in domestic sewage, irrigation return flows, dredged material or the by-products of clearing, snagging and debris removal from waterways or woody debris disposal from land areas. Impounded items are not solid waste until legal process has occurred.

d. "Source Reduction" is a method of waste reduction, through pollution prevention, in which any change in design, manufacturing, purchase or use of recycled or environmentally preferable materials or products, including packaging, re-

duces toxicity of these materials or products before they enter the waste stream.

e. "Waste Reduction" means decreasing amount of waste through source reduction or recycling.

6. Guidance:

a. The environmental protection hierarchy lists, in order of preference, source reduction, recycling, and disposal after treatment as recommended options for waste management. Waste reduction through source reduction is the preferred option. Disposal after treatment is considered the optional measure of last resort.

b. Reference f requires projects and facilities to complete waste reduction plans. Those plans must have assessments which identify opportunities for source reduction and recycling and outline methods to achieve this.

c. Design, construction, repair and maintenance of USACE projects shall consider use of environmentally preferable products consistent with mission and life-cycle cost considerations.

d. For consistency with the Federal Acquisition Regulation (FAR) and its supplements, contract solicitations for USACE activities shall comply with this policy. Federal Acquisition Circular 90-27, 31 May 95, amends the FAR to clearly reflect government preference for acquisition of environmentally sound and energy-efficient products and to establish an affirmative procurement program favoring items containing the maximum practical content of recycled materials.

e. Environmentally preferable products and products made from recycled materials, such as recycled plastic, reprocessed oil and retread tires, should be used to the extent practical. Specifications and standards must be reviewed and updated to ensure that products made from recycled materials are not unduly restricted.

f. The USEPA publishes "Procurement Guidelines for Government Agencies" (Reference g), which contains recommendations for implementing certain requirements of the RCRA. These guidelines should be consulted for development of recycling programs and contracts.

g. Local purchases shall comply with this policy and guidance.

h. Whenever possible, quantities of solid waste should be reduced at the location where the waste was generated by using returnable containers, separation for recycling, composting, and/or other methods.

i. Solid waste recycling programs must be compatible with applicable Federal, State, and local recycling laws and regulations. Care shall be taken to ensure that each USACE project and facility developing recycling programs fully understands storage and handling requirements of materials and conducts systematic safety and health evaluations, including hazard analyses. Handling, storage and transportation requirements shall be incorporated into all recycling programs.

j. Where practical, USACE projects and facilities should take part in recycling programs conducted by regional organizations, counties and/or local communities.

k. In general, USACE lands and facilities should not be used for storage or disposal of solid waste. Products of clearing, snagging, and debris removal from waterways and woody debris removal from land areas are not considered solid waste; therefore, USACE lands can be used for storage or disposal of such matter.

7. Dissemination: Please use the Environmental Compliance Coordinator network for distribution of this Guidance Letter.

FOR THE COMMANDER:

RUSSELL L. FUHRMAN (signed)
Major General, USA
Director of Civil Works